VIDEOTAP

In The Circuit Court of the 15th Judicial Circuit In and for Palm Beach County, Florida

STATE OF FLORIDA, et. al.,

Plaintiff,

-VS-

THE AMERICAN TOBACCO COMPANY, et. al.,

Defendants.

CASE NO. 95-1466AH

DEPOSITION
OF
KIP VISCUSI, PH.D.
July 23, 1997



A WH K

PROFESSIONALS SERVING PROFESSIONALS

A. WILLIAM ROBERTS, JR. & ASSOCIATES

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AIS	SCUSI, KIP	PH.D	Condo	nsc	
,		IN THE CIRCUIT COURT,	Page 1		Page
(,		IFTEENTH JUDICIAL CIRCUIT FOR PALM BEACH COUNTY, FLORIDA		1	STIPULATION
3	STATE OF FLORIE			2	It is stipulated by and among Counsel
	Plaintiffs,			3	that this videotaped deposition is being taken in
5	V# .	CIVIL ACTION NO. CL 95 1466AH		4	accordance with the Florida Rules of Civil Procedure;
6	AMERICAN TOBACC	O COMPANY, et al.		5	that all objections as to Notice of this deposition
١,	Defendants.			6	are hereby waived; that all objections except as to
8				7	form are reserved until the time of trial; and that
9		SITION OF: W. KIP VISCUSI, PH.D.		8	the witness has reserved the right to read and sign
10	DATE:	July 23, 1997		9	the deposition after review by counsel.
11	TIME:	8:24 A.M.		10	THE PERCEPTED. This is the suidestand
12	LOCATION:	COPPER MOUNTAIN RESORT, COPPER MOUNTAIN, COLORADO		11	THE REPORTER: This is the videotaped
13	TAKEN BY:	Counsel for the Plaintiff		12	deposition of W. Kip Viscusi in the matter of State
14	REPORTED BY:	JOANNE BLAIR . Registered Professional Reporter, CM		13	of Florida vs. American Tobacco Company held at
15		registered froiessioner Reporter, CH		14	Copper Mountain Resort, Copper Mountain, Colorado, on
16				15	July 23, 1997 at 8:24 a.m. My name is Joanne Blair,
17				16	Registered Professional Reporter. The videotape
16				17	specialist is Tim Gross. Counsel will now introduce
19				18	themselves, and then the deponent will be sworn in.
20				19	MR. KERRIGAN: Bob Kerrigan, representing
21	ווזט ב	JAM ROBERTS, JR., & ASSOCIATES		20	the State of Florida.
22	Charleston, SC	Columbia, SC		21	MR. ATKESON: Tim Atkeson, representing
23	(803) 722-8414	(803) 731-5224		22	the defendant.
24	Greenville, SC (864) 234-7030	Charlotte, NC (704) 573-3919		23	W. KIP VISCUSI, Ph.D.
25	(004) 204-1030	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		24	Being first duly sworn, testified as follows:
				25	
1	APPEARANCES OF	COUNSEL:	Page 2		Page
2		S FOR THE PLAINTIFF		1	EXAMINATION
. 3		TE OF FLORIDA		2	BY MR. KERRIGAN:
•	BY:	RIGAN, ESTESS, RANKIN 6 MCLEOD ROBERT G. KERRIGAN		3	Q. Good morning, Dr. Viscusi. My name is
5	460	East Government Street . Box 12009		4	Bob Kerrigan. We've previously been introduced this
6	Pen	sacola, Florida 32589 4) 444-4444		5	morning. We are going to take your deposition
,	ATTORNEY	S FOR DEFENDANT		6	today. As you know, it's being videotaped. I hope
8		RICAN TOBACCO COMPANY, et al.		7	that's not too distracting for you. In the event
9	BY:	OLD & PORTER, TIM ATKESON		8	that you need to take any kind of a break for any
10	· Den	0 Lincoln Street, Suite 4000 ver, Colorado 80203-0428		9	reason at all, including conferring with counsel, if
11		3) 863-2313		10	you will simply say, "I would like to take a break,"
12	ALSO PRE	SERT:		111	it could be for any reason and I will not inquire.
1		Carre Midanasahan		1	Tela marfacelly appropriate for you to do that for
13		Gross, Videographer		12	It's perfectly appropriate for you to do that for
13		Gross, Videographer AT REAR OF TRANSCRIPT)	·	12 13	personal reasons or any other reasons that you find
1		•		12 13 14	personal reasons or any other reasons that you find the need to take a break.
14		•		12 13 14 15	personal reasons or any other reasons that you find the need to take a break. Some of the terms that we will be using
14		•	·	12 13 14 15 16	personal reasons or any other reasons that you find the need to take a break. Some of the terms that we will be using this morning are terms of art or terms that have
14 15 16		•		12 13 14 15 16 17	personal reasons or any other reasons that you find the need to take a break. Some of the terms that we will be using this morning are terms of art or terms that have specific definitions. For the benefit of the jury,
14 15 16 17		•		12 13 14 15 16 17 18	personal reasons or any other reasons that you find the need to take a break. Some of the terms that we will be using this morning are terms of art or terms that have specific definitions. For the benefit of the jury, in the event that this videotape is played for them,
14 15 16 17		•		12 13 14 15 16 17 18 19	personal reasons or any other reasons that you find the need to take a break. Some of the terms that we will be using this morning are terms of art or terms that have specific definitions. For the benefit of the jury, in the event that this videotape is played for them, I may ask you if you use such a term that is not
14 15 16 17 18 19		•		12 13 14 15 16 17 18 19 20	personal reasons or any other reasons that you find the need to take a break. Some of the terms that we will be using this morning are terms of art or terms that have specific definitions. For the benefit of the jury, in the event that this videotape is played for them, I may ask you if you use such a term that is not commonly known, I may ask you to define that term:
14 15 16 17 18 19		•		12 13 14 15 16 17 18 19 20 21	personal reasons or any other reasons that you find the need to take a break. Some of the terms that we will be using this morning are terms of art or terms that have specific definitions. For the benefit of the jury, in the event that this videotape is played for them, I may ask you if you use such a term that is not commonly known, I may ask you to define that term a we go along in the questions and answers today. In
14 15 16 17 18 19 20 21		•		12 13 14 15 16 17 18 19 20 21 22	personal reasons or any other reasons that you find the need to take a break. Some of the terms that we will be using this morning are terms of art or terms that have specific definitions. For the benefit of the jury, in the event that this videotape is played for them, I may ask you if you use such a term that is not commonly known, I may ask you to define that term awe go along in the questions and answers today. In the event that I use a term incorrectly or have
14 15 16 17 18 19 20 21		•		12 13 14 15 16 17 18 19 20 21 22 23	personal reasons or any other reasons that you find the need to take a break. Some of the terms that we will be using this morning are terms of art or terms that have specific definitions. For the benefit of the jury, in the event that this videotape is played for them, I may ask you if you use such a term that is not commonly known, I may ask you to define that term a we go along in the questions and answers today. In the event that I use a term incorrectly or have included in my question a premise that is not correct
14 15 16 17 18 19 20 21 22 23		•		12 13 14 15 16 17 18 19 20 21 22	personal reasons or any other reasons that you find the need to take a break. Some of the terms that we will be using this morning are terms of art or terms that have specific definitions. For the benefit of the jury, in the event that this videotape is played for them, I may ask you if you use such a term that is not commonly known, I may ask you to define that term awe go along in the questions and answers today. In the event that I use a term incorrectly or have

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and no adverse inference will be drawn from that. The purpose today is to try to ask 2 questions as clearly as I can ask them, elicit 3 responses from you that are appropriate for the question that is asked. So you can help in that respect. In the event that you want to ever go back 6 to a previous answer, it's perfectly appropriate to 7 do that as well. No adverse inference will be drawn by me if you want it to go back and clarify an 9 earlier answer or elaborate on an earlier answer. 10 In the event that I ask a question that 11

In the event that I ask a question that assumes something to be true that's not true, I'm sure your counsel will pose an appropriate objection, and he may pose other objections as we go along. Please allow us to talk among ourselves to try to resolve that, and we would not expect you to respond anytime counsel raises an objection.

Do you have any reason this morning that you are not prepared to go forward with your deposition?

21 A. No.

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- Q. I understand you've been deposed many times in the past; is that correct?
- 24 A. Several times. A lot, I guess.
 - Q. And having reviewed your publications and

a copy of the Mississippi lawsuit at that time; is that also correct?

- A. That's true.
- Q. Have you in the meantime looked at the Mississippi lawsuit?
 - A. No, because that case seems to be gone.
- Q. When questions were asked of you in the Mississippi lawsuit about the lawsuit itself, what the lawsuit was claiming, and you had not had an opportunity to read it, did that cause you to think it may be appropriate to ask for or to read the Florida lawsuit?
 - A. No.
- Q. Do you have any interest at all what the State of Florida lawsuit is about in terms of the substantive allegations?
- A. I'm sure I care somewhat about it since -- if it's not about smoking, then there is no reason for me to be here. So I'm taking the word of the lawyers as to what it's about. I'm simply going to go in and tell people about what I've done in terms of my research and let them figure out how it relates to the lawsuit.
- Q. In regards to the risk perception work that you have done in conjunction with whoever else

Page 6

- all, it appears that you have been involved in litigation other than in tobacco litigation; is that correct?
 - A. That's correct.
- Q. You are currently at the Harvard LawSchool; is that right?
- 7 A. That's right.
- Q. But you are, I think, by training aneconomist; is that correct?
- 10 A. That's also right.
 - Q. You are not a lawyer?
- 12 .A. No.
- Q. What training do you have, if any, in medicine?
- 15 A. Never taken any courses in medical 16 school. So I guess that would qualify as no specific 17 training.
 - Q. You have provided us through counsel some information about your testimony in the Florida case. And before we start that, let me ask you if you've had an opportunity to review the actual lawsuit that was filed by the State of Florida.
 - A. I don't think I've been provided that.
 - Q. Okay. When you were deposed in the Mississippi case, I believe you had not been provided

- Page 8
 1 you've done it with, do you now understand that that
- could have any relevance in a claim by the State of
- 3 Florida for payments for Medicaid expenditures? If
- 4 you do think it has even the remotest connection with
- that, would you tell me what it is?
- MR. ATKESON: Objection. Calls for a legal conclusion.
- 8 BY MR. KERRIGAN:
 - Q. Okay. Subject to that -- and I'm not asking you to express an opinion on legal relevancy; I'm asking you to express an opinion on academic integrity. What could your opinions on risk perception have to do with the claims of the State of Florida that it has expended funds through Medicaid payments for people who have smoking-related illness and disease? How could individuals' risk perception have anything to do with that claim, if you know?
 - A. I don't know.
 - Q. Based on what I've just told you about that claim, that that is a claim of the State of Florida, and there may be other claims -- I'm dealing just with that claim -- would you agree with me that individual risk perception couldn't have anything to do with it?
 - A. I don't use individual risk perception

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1	information at all in my calculations, if that	1	analysis?
2	addresses your question.	2	A. Risk perceptions pertain to whether
3	Q. You are just using semantics to dodge the	3	smokers themselves understand the risks, which is
4	obvious question, are you not?	4	different than whether their smoking activity
5	A. No.	5	generates cost to other people.
6	MR. ATKESON: Objection, argumentative.	6	Q. The answer to my question is yes, they
7	BY MR. KERRIGAN:	7	are two different areas?
8	Q. Okay. I didn't mean to be argumentative,	8	A. Except to the extent that risk perception
9	but you said you don't use individual risk	9	affects how many people smoke, which in turn affects
10	perceptions. That's probably the single biggest	10	Medicaid costs.
11	failing of your work in risk perception, isn't it?	11	Q. We will deal with that in a minute.
12	A. I'm not sure what you are talking about.	12	That's very interesting. Do you want to rethink
13	Q. Why don't you tell me what you mean when	13	that, or is that your testimony?
14	you say you don't deal with individual risk	14	A. I've written that I've written the
15	perception. What did you mean by that?	15	risk perceptions affect smoking behavior.
16	A. I've analyzed by that, but when I	16	Q. I didn't ask that. I asked if you wanted
17	calculate the Medicaid costs into the other insurance	17	to restate what you just stated. It's fine with me
18	costs, the risk perception data do not enter in those	18	if you want to stay with that.
19	calculations.	19	A. I'll stick with that.
20	Q. Let's just talk about risk perceptions,	20	Q. Does smoking cause Grave's disease?
21	not your work in lifetime costs. We have two	21	A. I don't know the list of all the things
22	different areas that I understand you are going to	22	smoking causes or what probabilistic associations
23	express an opinion in this litigation.	23	have been found for all the different diseases.
24	A. Okay.	24	Q. I didn't ask about all the different
25	Q. Are they commingled?	25	diseases.
2.5			Page
,	Page 1 A. I don't mingle them.	٠ ١	A. I don't know.
2	Q. I don't either, but I wasn't sure of your	2	Q. Do you even know what Grave's disease is?
3	response. So risk perception as an independent	3	A. No.
4	discussion that we are having now has nothing to do	4	Q. Do you know what Berger's disease is?
1	with the State of Florida's claim for Medicaid	5	A. No.
5	reimbursements?	6	Q. Do you think smoking causes leukemia?
6		7	A. I don't know.
7	MR. ATKESON: Objection.		Q. Do you think smoking has anything to do
8	Mischaracterizes his previous testimony.	8	with peptic ulcers?
9	A. I will go with that objection as well. I	9	
10	think there are separable analytic issues the way I	10	A. It may.
11	pose the problem.	11	Q. In what respect?
12	BY MR. KERRIGAN:	12	A. To the extent that if people have some
13	Q. Let's go back to your comment you don't	13	sensitivity to tobacco or the chemicals in tobacco
14	deal with individual risk perceptions. You said that	14	and they swallow it in their saliva, it could affect
15	as it was relative to the lifetime cost analysis.	15	that.
16	That's what you just said.	16	Q. Do you think smoking has anything to do
17	A. That's the only context in which I said	17	with cancer of the cervix?
18	it because I do deal with individual risk perceptions	18	A. I don't know of a link.
19	when I analyze risk perceptions. But when I	19	Q. Do you think smoking has anything to do
20	calculate the lifetime costs associated with	20	with flat feet?
21	Medicaid, the individual risk perception data do not	21	A. No.
22	affect those calculations.	22	Q. Have you done a regression analysis on
23	Q. Good. So on individual risk perceptions	23	that question?
24	we are talking about an entirely different academic	24	A. I don't have data on whether people have
25	area or area of discussion from the lifetime costs	25	flat feet.

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Q. You had it in the second survey.

A I have information whether people think that that's the case, but I don't have data on whether people have flat feet and whether they smoke and whether smoking causes flat feet.

Q. Did you do a regression analysis on the question does smoking cause flat feet?

A. No, I did a regression analysis on whether people perceive that smoking causes flat feet.

Q. What did you find?

A. Some people think it does.

Q. What percentage of the people?

A. I forget the percentage. It's small.

Q. Did you find any significance from that?

Did it tell you anything academically?

A. I think a lot of people are willing to blame smoking for just about everything.

Q. Do you think smoking causes mental illness?

A. I don't know. I don't think it does.

Q. Do you know why that question was deleted

23 from the second Audits and Survey?

A. I don't know why that it was -- I don't

know that it was deleted.

thought about risk. And during the course of that

work, I went through a lot of the material they had,

not just the Audits and Survey data, but articles that they collected, since they too were interested

in how people think about risk.

To me the Audits and Survey data looked like a gold mine in terms of the information. It's a risk data set on an important question. People hadn't looked at smoking risk perceptions in any detail. So I asked if I could use the data set. And it took maybe a year or two for them to give me permission to use it, to look at the data.

Q. You really had to kind of struggle to get this from the tobacco people through Jones, Day, according to you. They weren't ready to just give it to you; you had to keep asking for it.

A. That's correct.

Q. Where is all the information you claim they gave you that you reviewed? Where is that? That hasn't been disclosed to us.

A. That was not in connection with this litigation.

Q. Well, but it was a function of your involvement in this. So you now say because it's not involved with this litigation, you didn't produce

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Q. Did you remember having a discussion about it?

A. I've never discussed that question.

Q. Let me ask you this question,

Dr. Viscusi, abstractly. I come to you and I have a specialized interest in something, and I bring you a data set. This data set produces something that's counter-intuitive; in other words, let's take it a step further. Something that is an absurdity, an intellectual absurdity. And I give it to you, and I say, "Dr. Viscusi, I would like to give you this data set, let you look at it. And if you like it, I want you to publish something about it." Would you do that?

A. No, because nobody has ever told me to publish anything. I've never been in a situation where people come to me and say, "Here is the data. Go publish it."

Q. Please explain to me what your relationship is with these tobacco people on the Audits and Survey. How did you get into that?

A. I originally advised the tobacco people, as you call them, actually, Jones, Day, on risk perceptions. This was back in the '80s. And I told them what I knew about risk perceptions, how people

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A. This was ten years ago. It was not litigation-related to any litigation.

Q. How do you know that?

MR. ATKESON: Objection, Counsel. We are now I think getting into a legal argument about what was appropriate in discovery. A discussion you and I should have and not --

MR. KERRIGAN: I agree with that. Let's leave that and go to this question.

BY MR. KERRIGAN:

Q. How do you know what was relevant in the mid-1980s on litigation? Who told you what litigation was pending against these companies in 19 -- in the mid-'80s?

A. They did have some individual suits against them.

Q. You are not answering my question. My question is, How did you know that? How did you know about their legal -- their litigation status?

MR. ATKESON: If you knew.

MR. KERRIGAN: I object, Counsel. That is assisting the witness in answering the question. That is a basis to have this witness's testimony stricken in Florida. I caution you, don't do that

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Page 17
                                                                 where I give you a data set, tell you to publish
    again.
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                                                                 something, your response was no one tells me to
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            MR. ATKESON: Counsel --
                                                                 publish something. I'm asking you overtly here,
            MR. KERRIGAN: Don't do that again in
 3
                                                                 straight up: You did this to advance the interests
    Florida.
                                                                 of your clients, the tobacco companies, through
 5
            MR. ATKESON: You're asking questions --
                                                                 Jones, Day, did you not?
           MR. KERRIGAN: You can't do that in
 6
                                                                     A. No. I was not even paid to write the
    Florida.
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                                                                 stuff. At the time I wrote it, I wasn't even working
           MR. ATKESON: Counsel, you and I can have
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                                                              9
                                                                 for them.
    a discussion here, okay?
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                                                                     Q. Is this just coincidental that you are
           MR. KERRIGAN: We can, but don't tell the
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10
                                                                 now involved in this litigation, do you think?
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    witness what to say.
                                                                     A. I didn't know there would be this
            MR. ATKESON: You can wave your finger --
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                                                                 litigation.
            MR. KERRIGAN: I'm not waving my finger.
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    I'm just saying don't tell the witness what to say.
                                                             14
                                                                     Q. You were paid by these tobacco companies
                                                                 always through Jones, Day; I understand that. In
    That was a speaking objection. When you tell the
                                                             15
15
                                                                 fact, you've never taken any checks directly from any
                                                             16
    witness --
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                                                                 tobacco manufacturers, have you?
                                                             17
            MR. ATKESON: Counsel, will you let me
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                                                                     A. I did one morning of work reviewing a
    finish? You've said what you want to say several
                                                             18
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                                                                 hazard warning label on the Premier cigarette, and
    times. What I would like to say is that you are
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                                                                 I'm not sure where the check came from, but I've
     asking a question that assumes a fact, okay? My
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                                                                 always made clear that was work directly for
    wording is the same as saying objection assumes a
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21
                                                                 R.J. Reynolds.
    fact not in evidence.
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                                                                      Q. In all other respects, you get checks
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            MR. KERRIGAN: I accept that.
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                                                                 from law firms, particularly Jones Day and
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    BY MR. KERRIGAN:
24
                                                                 Arnold & Porter; that's how are you get paid, is it
         Q. Dr. Viscusi, how is it that you know so
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                                                                                                                 Page 20
                                                     Page 18
    much about -- and that may be an unfair
                                                              1
                                                                 not?
    characterization. How is it you know anything about
                                                              2
                                                                      A. That's correct.
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                                                                      O. You don't find that intellectually
    what these companies were facing in litigation in the
                                                              3
 3
                                                                  questionable?
    mid-'80s? You were in academia.
                                                                      A. No, because if I'm working directly with
                                                              5
         A. I read the paper.
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                                                                 lawyers from Jones, Day or Arnold & Porter and I've
         O. You've reached the conclusion that you've
 6
                                                                 never even met the tobacco people, I would want to
    testified to here under oath today by reading the
                                                                 have the checks coming from the people I'm working
                                                              8
     paper in the mid-'80s?
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                                                              9
                                                                 for.
 9
         A. I could be aware of lawsuits by reading
                                                                      Q. It's beyond just getting checks from
    the lawsuit. The Cippolone case was active at that
                                                             10
                                                                  these law firms, isn't it? You have a much more
    time. And I met with Jones, Day lawyers, and they
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                                                                  substantial involvement with these law firms, don't
    apprised me that there was an active case. In fact,
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    I reviewed six or seven volumes of Jeffrey Harris's
                                                             13
                                                                 you?
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                                                                      A. I'm not sure what you mean.
                                                             14
     depositions.
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                                                                      Q. You've been working with them to try to
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         Q. Why did you do that?
                                                                  tweek this Audits and Survey data to make it
         A. There was an economist who testified for
16
                                                                  defensible, have you not?
    the plaintiffs, and they just wanted to give it to me
                                                             17
17
                                                                      A. No. The data is out there. I'm not
                                                             18
     as background to see what I thought of it.
18
                                                             19
                                                                  tweeking it.
         Q. What did you think of it?
19
                                                                      Q. You haven't communicated with
         A. I didn't particularly like the kinds of
                                                             20
20
                                                                  Arnold & Porter in regards to this second Audits and
     things Jeffrey Harris said since he seemed to be
                                                             21
21
                                                                  Survey data?
                                                             22
     dealing mostly from ideology rather than facts.
22
                                                                 ____A. I communicated with them about some of
         Q. You deal in facts?
                                                             23
23
                                                                  the implications of the data, but I didn't tweek the
24
         A. That's my main stock in trade, yes.
                                                                  data themselves.
25
         Q. Earlier I asked you about a hypothetical
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Page 21 O. Did you have anything to do with the MR. KERRIGAN: I say stricken in this formation of any questions that were asked in either sense. He is not permitted in Florida to bootstrap survey? his opinion by what other people think of it. MR. ATKESON: Counsel, we don't need to A. No. 4 4 Q. Let's go back to my hypothetical. How characterize things. People can read it and see what 5 they think of it. You asked him was he proud of it. long do you think Jones, Day and Arnold & Porter focused grouped up these series of questions to He said yes, and that was why. fabricate, to just fabricate evidence to be used in BY MR. KERRIGAN: 8 trial? How long do you think they worked on that to 9 Q. Has your '94 paper been published yet? 9 come up with the Audits and Survey information that 10 A. Which one is that? 10 Q. Do you have a paper dealing with smoking 11 they came up with? 11 published or prepared in 1994? MR. ATKESON: Objection. Argumentative 12 12 and assumes facts not in evidence. MR. ATKESON: Counsel, let me ask you. 13 13 Are we talking about risk perception or lifetime BY MR. KERRIGAN: 14 14 methodology? Q. Let me restate the question. Do you 15 15 MR. KERRIGAN: I'm asking was there any think that Jones, Day and 16 16 Arnold & Porter engaged in the Audits and Survey 17 paper. 17 work, particularly Jones, Day, to fabricate evidence BY MR. KERRIGAN: 18 18 for litigation? 19 Q. I'm just asking, do you have a paper that 19 was written in 1994 that's not been published yet? 20 A. No. 20 A. I know of no unpublished papers that I've 21 Q. Do you think it was just a big, 21 sent off to journals from 1994. intellectually honest endeavor? 22 22 23 O. I didn't ask that question. Do you have A. I think it would have to be, and in my 23 any papers that haven't been published yet? You may case I did several sensitivity analyses, because if 24 24 have said, "Well, I've elected not to publish the it was not intellectually honest, somebody else would 25 25 Page 22 Page 24 paper I wrote and I circulated but I haven't go out and run a survey and clobber them. O. Let me just ask you this: You've made 2 published it." 2 two statements there, which I've read that you've A. About smoking. 3 3 O. Um-hum. stated before, so it wasn't like a new bit of 4 A. None that I know of. 5 information. Do you really believe that what you did -- I'm talking about intellectual honesty here --O. How about 1995? 6 A. None that I know of from there either. was an appropriate sensitivity analysis about an 7 O. Now, you talked about a sensitivity industry-produced survey? Do you think it was 8 8 analysis you did on the Audits and Survey. 1985, I appropriate, what you did? 9 A. Oh, sure. I think it's very appropriate, assume, you are talking about; is that right? The 10 10 11 1985 Audits and Survey? what I did. 11 12 A. Right. 12 Q. Are you proud of that work? Q. This sensitivity analysis that you did A. Yes, and I think that it's highly 13 13 14 respected in the field. 14 Q. I will move to strike that because you 15 A. Drafting alternative forms of the 15 question, which I would then administer -- actually a are not permitted, Doctor, to tell us what other 16 16 person working through me would administer -- using a people think, because we will have other people 17 telephone survey in the Durham, North Carolina, area. testify about your work and what you did and how you 18 O. That's when you were at Duke? 19 reached the conclusions you did. Let me just get 19 A. That's correct. 20 right to --20 21 21 Q. What was the volume of the respondents MR. ATKESON: Let me object now. You involved, the number? 22 asked him was he proud of it. He said yes and he is 22 A. A couple hundred. I would have to look 23 telling you why he is proud of it. He is allowed to 23 24 answer it. It should not be stricken. It was 24 it up. It's in my book. Q. And it's your opinion that that -- what 25 responsive to the question. 25

Page 25 other sensitivity analysis did you do? 1 mail. A. We did some pretesting of questions, and 2 Q. Here is a paper that directly refuted 2 generally people thought in terms of the way they what you said. 3 thought about it, thinking in terms of cases out of a A. No, it didn't directly refute it. He 4 hundred, an approach that they thought was meaningful 5 asked a different question. 6 Q. Okay. The inference is a refutation of in the telephone interview. 6 7 Q. Now, wait just a second. Who thought what you did. 7 A. He disagrees with me, but that's not a what was meaningful? 8 8 A. Respondents. In other words, when we direct refutation. 9 9 Q. But in academia, wouldn't you write to asked people questions, they would often respond in 10 10 him and inquire of his methodology or have some terms of percents. 11 11 academic discussion? Here you have differences of 12 Q. You published this data? 12 opinion. Wouldn't you normally do that? A. Oxford University Press published it. 13 13 A. I don't write to everybody who disagrees Q. 200 respondents? 14 14 A. Roughly. 15 with me. In my field I'm -- well, I'm sort of the 15 definitive target in some sense. If you are the king Q. Any other sensitivity analysis? 16 16 of the hill, then people use you as the reference A. None published. 17 17 point, so that he would not be the first person who Q. Dr. Viscusi, I've noticed in the 18 18 Mississippi deposition, and correct me if I'm wrong, has ever disagreed with me. 19 19 that you believe that because your work is published 20 Q. Which hill are you king of? 20 A. I do risk -and, according to you, peer-reviewed, that somehow 21 21 that raises it to the level of infallibility. Have I 22 MR. ATKESON: Can we just take a quick --22 misunderstood that? 23 I apologize. 23 A. Well, it's published and peer-reviewed in 24 (A break was taken.) 24 the very best places. If I'm wrong, people will come 25 THE VIDEOGRAPHER: We are on the record. 25 Page 26 Page 2 BY MR. KERRIGAN: after me in the literature in these same types of journals. Nobody has come after me yet. 2 Q. I think we left with the question, and 2 you were responding to it and the phone started to Q. Now that it's become highly relevant, 3 ring. Which hill are you king of and who made you involving a lot of money, as opposed to an esoteric king? Two questions. issue, people are coming after you right now, are 5 5 A. I'm not sure who made me king, but by they not? 6 6 that I meant that in the field of individual and 7 A. Not that I know of. Q. What papers do you know that have societal responses to risk and the economics of that, 8 recently been published that just completely refute my work generally in most of the areas I work in was the first that was ever done and serves as the the conclusions that you've reached, if you know of 10 10 reference point for people who want to enter the any papers? 11 11 field. So that other people writing in these topics 12 A. I know of no papers that completely 12 refute it. I know of one paper that disagrees with would use my work either as the definitive target or 13 13 what they follow. me, done by somebody out in California and published 14 14 in some health journal. They asked the question --Q. Well, the hill you are king of now is in 15 15 risk perception on smoking; is that correct or not the risk perception question in a different way. 16 16 17 Q. You actually know a little bit more about 17 correct? 18 that author because the author sent you the paper? 18 A. That's just one area I work in. My general -- my big hill is risk and uncertainty. For 19 A. Yes. 19 example, I'm the founding editor of the journal Risk 20 Q. And you've never answered him; isn't that 20 and Uncertainty. This is the kind of thing I do and 21 21 correct? 22 A. The author just sent me the paper. I get 22 that I built my reputation on. 23 lots of papers. I'm on a half a dozen editorial 23 Q. Right now you are the person who is espousing the theory that people overperceive risk 24 boards. I get papers all the time. I don't write 24 about smoking? letters to everybody who sends me something in the

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A. That's certainly true.

Q. I don't want this to be argumentative, which the very question may be. You don't consider that an absurdity?

A. No.

Q. You don't consider it intellectually nonsense?

A. No.

Q And you don't consider that your conclusions are based on evidence that has been prepared for litigation by the law firm representing the tobacco companies?

A. No. My conclusions are quite robust with respect to reasonable specifications of a survey question.

Q. And I'm going to get into the specifics of really what you think, but let me see if I can kind of give an overview. If the tobacco companies, cigarette manufacturers, opened up their files, their research files, their offshore research files, as well as the limited research files they may have here, if they opened up all these research files and showed what they know about what their product does in terms of illness and disease, that according to you, that once they did all of that, people would

actually think that smoking was less riskier than they always thought before?

MR. ATKESON: Objection. Assumes a fact not in evidence.

BY MR. KERRIGAN:

Q. I think that deals with the offshore research. So let's just say opens up all of their research files, tells the public everything they know about what smoking does, what diseases it causes, what illnesses it exacerbates. They tell the public — in other words, they come — I call come clean with everything they have got. Now according to you, that actually is going to make people think that smoking is less riskier?

A. I never said that. What I said is that people already overestimate the risk. So to the extent that it increases their risk perceptions, it will make them more in error than they already are.

Q. How is that any different than what I just said? Really, the logical conclusion is what I'm asking you about. If the tobacco companies tell all they know about their research, they come clean, they open it all up, according to you, that information in the marketplace will actually cause people to have a lower risk perception than they had

before that information came out?

MR. ATKESON: Objection, Counsel. That's not what he said, and it mischaracterizes his testimony.

BY MR. KERRIGAN:

Q. I'm asking.

A. That's not what I said.

Q. I want you to tell me the effect on risk perception, according to the work that you've done here now, if the tobacco companies say, okay, we are publishing everything we've got, it's all coming out, all of our research; how is that going to impact risk perception?

MR. ATKESON: Objection. Incomplete hypothetical. What are you assuming the research says?

MR. KERRIGAN: Well, that the research establishes illness, disease, death, carcinogenic components of cigarettes; that it establishes a horrendous -- a horrendous connection between cigarette smoking and illness and disease. I want you to assume that that would be established in the marketplace. Okay? I understand it's a hypothetical, Counsel.

MR. ATKESON: Let me just ask, I mean, in

Page 32 terms of completing the hypothetical, are you assuming that the disease rates and death rates that we observe today change in any way?

MR. KERRIGAN: I'm not assuming anything about disease rates and death rates. That would be totally irrelevant to the release of data. Data being released will have no impact on disease and death today if they publish studies. Do you agree with that? If they published their research studies, how is that going to affect the number of people ill today or who are dead? How is that going to affect it at all? It won't.

A. The body counts are the body counts. Is that what you are saying?
BY MR. KERRIGAN:

Q. Yeah, an people who are diseased and ill now are not going to be impacted by the release of publications about causality; do you agree with that?

A. I'll agree with that.

Q. Okay. Now, I'm asking you to assume that this is all published and it's all put out, all of the information about smoking and its cause of illness and disease. And I want you to assume that it reveals substantial information on causality,

substantial information on causality. How is that

CondenseIt 124 VISCUSI, KIP PH.D FLORIDA vs. TOBACC Page 33 going to affect risk perception in the marketplace? does the new information that you are assuming woul A. I think a lot depends on how it's 2 2 come out compare to the information that we currently characterized by the press, but we've had substantial have? I'm saying if you want to fill that in. 3 information on causality for 30 years, at least. The great. If you don't, don't. But that's the Surgeon General's warnings have been on cigarette objection I'm making. 5 5 packs for over 30 years. And from the informational 6 MR. KERRIGAN: Okay. I accept that 6 standpoint it's not clear that you are getting new objection. So let's just start all over. 7 7 information. That's not to say that depending on how 8 BY MR. KERRIGAN: 8 Q. What illnesses and disease do you think the press characterizes it, it wouldn't have an 9 cigarette smoking causes? You personally. effect. But it in terms of what we are truly 10 10 learning, I don't see where the release of their A. Cause in a probabilistic sense? That's 11 11 documents is going to add anything to what we would the way I --12 12 get through better statistical studies of body 13 Q. No, no. Cause. Causality. Cause. 13 Proximate cause. Cause. I'm asking you what illness counts, linking body counts to smoking, et cetera, 14 14 that the Surgeon General has undertaken. 15 and disease does cigarettes cause. I'm not 15 Q. Is your statement it will have no effect interested in terms of probabilistic because that was 16 16 on risk perception or it will have an effect? Either not in my question. If you are not able to answer 17 17 18 one I'm going to ask you further about it unless you 18 the question on what illnesses and disease cigarettes say it has no effect. cause without using the word "probabilistic," then 19 19 A. Depends on how the press plays it out. 20 you have to use it. 20 Q. Let's say the press plays it out to be 21 21 A. I have to pass because I cannot think of the truth. The truth. They publish it. They just 22 a single disease that cigarettes cause with 22 23 republish what the industry has. And this industry 23 probability of 1.0 in all people that smoke. That's research shows causality in all kinds of illnesses what cause would mean unless you introduce 24 24 and diseases. I'm asking you, How will that affect 25 probabilities. Page 34 Page 3 risk perception? Q. Have you asked the cigarette companies to 2 MR. ATKESON: Counsel, I still believe 2 show you their causation research? it's an incomplete hypothetical. Are you assuming A. No. 3 3 Q. Wouldn't you want to see that?

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that the causality that it's showing is different
    than what we understand today?
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            MR. KERRIGAN: Well, Counsel --
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            MR. ATKESON: Because if it's not, then
    your question doesn't make any sense.
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            MR. KERRIGAN: Let's back up. It makes a
    lot of sense. This is what I call the half-baked
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    approach here. Are you suggesting that causality has
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    been established and you've been told to assume
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    causality in your testimony? Because that's done --
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           MR. ATKESON: Counsel, this is a
    discussion you and I are having, not you and the
15
    witness, okay?
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           MR. KERRIGAN: Okay.
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           MR. ATKESON: I'm objecting to your
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    hypothetical. I'm saying it's incomplete. I'm
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    asking you if you want to fill it out in a way. If
21
    you don't, you don't have to. That's all.
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           MR. KERRIGAN: Let's go back to --
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           MR. ATKESON: You are asking him, does
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    new information make a difference. I'm asking you in
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A. Why?

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Q. Because you are assuming that there is nothing in the published literature that shows causality 1.0. So if they have that data, then the public's perception would be changed, would it not?

A. We know based on smoking experiences that 100 percent of all smokers do not die from cigarette smoking. We have detailed statistical studies that would tell me more than what they did with laboratory rats in Winston-Salem, North Carolina.

Q. You are now assuming that the research that the company has involves laboratory rats and therefore you are not interested in it. Is that what you are saying?

A. I'm saying the detailed statistical studies are done with publicly available data, and there has been lots of attention paid to that by government officials, by academic researchers. And from my standpoint, that would tell me more about th risk than what they would do with their smaller-scale case studies or laboratory rats or whatever it is

terms of saying something about that information, how

Page 37 A. Apart -- if you were going to extract they do. 2 Q. You said whatever it is they do. You from probabilities, it's untrue. We know that 100 percent of all smokers do not get lung cancer. A don't know what they do? 3 reasonable person should believe the probability is A. I don't know what they do. 4 not zero. In fact, most people believe the Q. You don't know what they have done? 5 probability of getting lung cancer is greater than A. I don't know what they have done. 6 O. And you've never asked for it? what the Surgeon General estimates. It's a 7 probabilistic causation relationship. A. Never. 8 Q. You've given the same answer. I've asked 9 O. Because you think that the information 9 that's kind of out in the public from governmental the same questions, and we are going nowhere with 10 sources and all is sufficient? 11 11 A. I've always taken the Surgeon General's 12 MR. ATKESON: Counsel, that kind of 12 characterization is not helpful. If you want to ask risk assessments as the reference point. So my job 13 13 is not to challenge the medical evidence. I'm not a a different question, that's fine, but telling the 14 witness we are going nowhere doesn't add anything to doctor. My job is to analyze how people think about 15 15 risk given the most publicly accepted government the deposition here. 16 16 position on this, which is the view of the Surgeon 17 MR. KERRIGAN: I agree. 17 18 BY MR. KERRIGAN: General. 18 O. Let's just talk about risk perception in 19 Q. Why won't you answer the question? 19 20 MR. ATKESON: Argumentative, Counsel. a very basic way. Hypothetically let's assume that 20 the tobacco companies have research that establishes 21 MR. KERRIGAN: Wait just a second. Let 21 me state the question because maybe in truth he 22 the pathogenic cause of lung cancer, and it is 22 honestly didn't understand it because I didn't say it cigarette smoking. Let's say they have got that 23 23 research. Never been published. Never been told to 24 right. 24 25 MR. ATKESON: Maybe he answered it. the public. Do you think that would affect the 25 Page 38 Page 40 public's risk perception if that research was MR. KERRIGAN: He has an answer he is going to give regardless of the question, in my revealed? 2 opinion, but that's an aside we --3 A. That doesn't sound like new news to me, MR. ATKESON: Counsel, if we are going to that cigarettes have some probabilistic effect on have this discussion, we might as well just go off lung cancer. So the question is whether that 5 the record because we can do this all day. information conveys a higher probability than people 6 already think. Right now we've got on average people 7 MR. KERRIGAN: Okay. 7 BY MR. KERRIGAN: think it's a considerably higher probability of 8 getting lung cancer from cigarettes than the Surgeon 9 Q. Are you trying to extract some medical 9 significance to the fact that every person who smokes General estimates. Many, many, many times more than 10 10 doesn't get lung cancer? Do you see some medical the Surgeon General estimates. So if their evidence 11 significance to that? 12 is still well below what people think already, then 12 A. Yes. it's not going to increase risk perception. 13 13 14 Q. Maybe you didn't understand the question, 14 Q. Has the thought occurred to you that if the public knew hypothetically that cigarette smoking 15 and I may have used a medical concept that you are 15 not familiar with. I want you to assume that like causes lung cancer, not as a risk factor, probabilistic -- that it causes lung cancer, do you 17 asbestos causes asbestosis, cigarette smoking causes 17 think that knowledge would change the public's risk 18 lung cancer, and that the tobacco companies have 18 19 established it unequivocably. Not that it's a 19 perception? A. If the probability of causing lung cancer probabilistic risk factor or any other such thing. 20 20 That it causes it, period, end of story. Do you is 1.0, sure, it's going to change the risk 21

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cancer?

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true. You are not an epidemiologist?

perceptions, but that's not true.

Q. You keep saying what's true and not

A. I can observe the fact that every smoker

think that would affect the public's understanding of

the risk if the tobacco companies revealed research

that established causation of smoking and lung

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does not die from lung cancer. We know that that's 1 2

- Q. You've just answered a question I didn't ask because I never said anything about dying from lung cancer. So I want to go back to the question that I asked. You said you know that every person that smokes doesn't die from lung cancer.
- A. Let me correct that to say every person who smokes doesn't get lung cancer.
- Q. Before they die?
- A. Before they die. 11
- O. That doesn't deal with the question of 12 causation, however. If the public's risk perception 13 is affected by what they know, do you have an opinion 14 that if the cigarette manufacturers published 15 research data that showed that cigarette smoking 16 causes lung cancer, period, that they published that, 17 would that have -- this is a hypothetical question, 18 19 Counsel.

MR. ATKESON: Counsel, let me object on this basis. The witness is trying to answer your questions based on the way he defines cause. You want to ask the question using a different definition of cause. You emphasize the word cause in your sentence, but when he answers it using his definition

of cause you say that's not what I wanted to get an 1

- answer from. And I think it would be helpful here if 2
- you when you say causes lung cancer, if you can tell 3
- the witness what you mean by that, I suspect he will
- be able to answer your question.
- BY MR. KERRIGAN: 6
- Q. Before we get to that -- and thank you 7 for that, Counsel -- you are not trained in 8 9 epidemiology?
 - A. No.
 - Q. You are not trained in medicine?
- 12
- Q. Some of the diseases that I talked about 13 this morning, you didn't even know what they were, 14 correct? 15
- A. I've heard of them but I couldn't tell 16 you what they are. 17
- Q. Okay. Do you think that the public has 18 an understanding of, however you want to use 19 causation, I don't care how you define it -- that 20
- will be the easiest way to ask this -- do you think 21
- the public has an understanding of the diseases that 22
- you don't know anything about and their relationship 23 to smoking? 24
 - A. They know that smoking shortens life and

can cause death. How it could cause death, whether

they can enumerate every particular cause of death or illness, I doubt if they could do it.

- Q. Is that true? Smoking shortens life and causes death?
- A. That would be a reasonable, subjective 6 assessment given the evidence that's out there, that 7 smoking is risky. 8
 - Q. Smoking is what?
- A. Risky. 10
- Q. I thought we were talking about 11 causation. Why did you use the word risky? 12
- A. It has a probabilistic effect on your 13 health and longevity. 14
 - Q. I thought earlier we were saying that cigarette smoking shortens one's life and causes illness and disease. Are you saying --
- A. It shortens your expected lifetime, so it 18 decreases your probability of survival. 19
- 20 Q. And I asked you if that was true and you said what? 21
- A. A reasonable person would think that it's 22 true, given the evidence that's out there. 23
 - Q. Do you think that the cigarette manufacturers can do anything that will help the

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public understand the risk any better than they have already done?

A. Right now the public overestimates the

risk associated with smoking. Anything they do to help the public understand better would be to get people to lower the risk perceptions. I don't think

the cigarette companies would be permitted to do anything that would get people to lower their risk

perceptions. 9

Q. So you are saying that anything they do, 10 anything they do in terms of dissemination of public 11 information, is going to lower risk perception? 12

A. No, I didn't say that at all.

Q. Tell me something that they could do that would raise risk perception.

A. There are lots of kinds of alarmist

information you could provide. You asked the question could they do anything that could get people to better understand the risk. We have a situation now where people overestimate the risk. To better

- understand the risk would be to lower people's risk 21 perception. I know, as an observer here, I think the
- cigarette companies would not be permitted to do 23 anything that would get people to lower their risk 24
- perceptions.

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1 O. I think in the past -- let me just ask you this question: If they opened up all of their 2 research data, published everything, you've

previously testified here today that in your opinion it would have no effect on risk perception; is that

wrong? Have I misunderstood your answer?

MR ATKESON: Objection.

Mischaracterizes his previous answer.

BY MR. KERRIGAN:

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Q. Tell us what your answer -- let's say they publish everything they have, all their research data. And I want you to assume this hypothetical, that they have offshore research data. That they publish this research data on causality. Will it have any effect on risk perception?

A. How risk perceptions are affected is going to depend not so much on the data but how it is portrayed in the press. For the same reason that people don't form their scientific judgments by reading Science Magazine and the New England Journal of Medicine, I don't think many people are going to go off to read these research files. They will wait and see what the spin is in the press and see what effect that has.

Q. When you were given this information from

correspondence that supports that?

A. I don't know. I try to clean up my 2

office, and that's -- I got the data when I was at Northwestern and analyzed it when I was at Duke.

I've had two moves since then. So I don't know how

many files I've retained from ten years ago. I think it's unlikely that I have such letters. 7

Q. Do you think that Jones, Day -- I'm going to use a lay term here -- cooked up the questions to get the results they wanted?

A. I think if they did cook up the questions, they knew they would get hammered in the court when they presented it. So I think, if anything, they would try to err on the side of writing questions that would be defensible with an impregnable lot of argument. Otherwise, they are opening up a lot of argument, which they would get nailed.

Q. Do you find it unusual that people of academic respect have not embraced your work on perceptions of smoking?

A. If you read the various quotations in the back of the book and read the reviews I've gotten of my work at Oxford University Press, Journal of Political Economy, Review of Economics and

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Jones, Day, did you think it was suspect? The Audits and Survey information of 1985, did you think that

was a little suspect since they had done the work on

it as a law firm that had clients that had an interest in the outcome? Did you kind of as a

academician think, you know, this might be a little

bit funny here, a little suspect?

A. I didn't think it was suspect. I did want to show with my sensitivity tests that their conclusions were robust with respect to what I consider to be reasonable variations on the questions.

Q. My question was, When it was initially presented to you, as an academician, you didn't think, you know, this is kind of odd that they have got this survey data that a law firm has done for a client? You didn't think that was a little unusual to be releasing it to the academic community through you?

A. No. In fact I had to fight them year after year to get the data. So it was not like they were trying to give me the data.

Q. Do you have letters that would support the statement you just made here, that you tried for years to get this data? Do you have some

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Statistics, which are three of the leading outlets in the field, you will find that these people have 2 embraced it. 3

O. Well, I accept that as your answer. I know you previously testified to that. I'm going to ask you this question: These people that you claim by this peer-review process, or whatever, who you claim have embraced this study, your conclusions, did. you disclose to them the working papers and files of Jones, Day in the creation of this Audits and Survey data?

MR. ATKESON: Objection. Assumes facts not in evidence. And also when you say it's his term "embraced," actually it's your term "embraced."

MR. KERRIGAN: I accept that.

BY MR. KERRIGAN: 16

> Q. You are not suggesting that the people that have peer-reviewed your work have been fully informed about the underlying structure of the Audits and Survey data? You are not suggesting that, are you?

> A. I believe I include the Audits and Survey questionnaire as an appendix in my smoking book. I would have to check, but I would make it available to anybody who wanted it.

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Page 49 O. Not the question that I asked but I Jones, Day office in Cleveland. Here is their file accept that answer to lead us towards a better on information. The Audits and Survey information resolution of the question. Did you disclose to the was there. Jeffrey Harris's depositions were there. I saw no other supporting documents, so I assumed publishers and to the peer-review community the working papers, the working papers of the Jones, Day that there were no other supporting documents. 5 staff in the creation of the Audits and Survey data 6 Q. But you didn't ask? 6 of 1985? Did you give them that data? 7 A. I wasn't -- at the time I didn't have the 7 MR. ATKESON: Objection. Assumes facts 8 data. There was no reason to ask. 8 not in evidence, that such documents exist. Q. After you got the data and you looked at 9 9 A. I've never seen such working papers. it, did you then ask, say, "I would like to see how 10 10 11 BY MR. KERRIGAN: 11 you put this survey together? I would like to see the working papers"? 12 O. You haven't? 12 A. No. 13 A. No. But what I did instead is I designed 13 Q. Surely you asked for them. my own questions and tested my own questions before I 14 14 A. No. I didn't know that they had any published the work using the Audits and Survey data. 15 15 Q. We've already dealt with what you've working papers. 16 16 Q. You haven't asked. How would you know if 17 called the sensitivity analysis, the 200 or so 17 they did or didn't have them? 18 telephone surveys at Duke. We've covered that, 18 A. If I haven't asked, I wouldn't know. haven't we? Is there some other sensitivity analysis 19 19 20 out there that we have not discussed? O. Right. 20 21 A. I didn't ask. 21 MR. ATKESON: Counsel, you asked him what Q. But if you are pursuing something from an 22 22 he did when he got the data. He told you. Okay? I intellectually honest perspective, Dr. Viscusi, truly 23 mean, let's not try to imply here that he is not 23 you would want to see the working papers that were 24 answering your question. He is. 24 used to create this Audits and Survey questionnaire, 25 MR. KERRIGAN: I don't know what that 25 Page 50 Page 5 objection is. wouldn't you? 1 A. You are assuming that there are working BY MR. KERRIGAN: 2 papers. It never dawned on me that there were Q. You didn't do any other sensitivity 3 3 analysis? I want to make sure I understand that. working papers. 4 4 5 Q. What if the working papers -- I want to 5 A. Not with smoking, but I've used risk perception questions in other contexts. ask you to assume there are supporting documents for 6 this. Are you really -- are you really saying that 7 Q. I understand that. You didn't do 7 you don't think there is any file of information that anything else with this smoking data other than what 8 8 you did at Duke? preceded this survey that would be relevant to your 9 9 inquiry? 10 A. That's correct, 10 Q. Okay. We got that. Now, you say that 11 A. I didn't see any file. 11 you didn't want to look -- maybe you didn't say 12 Q. My question was, You don't think there is this. Did it strike your intellectual curiosity, How a file of information on how they put this thing 13 13 did these lawyers put this thing together? And why 14 14 together? 15 MR. ATKESON: You asked him to assume 15 did they word these questions exactly this way? Didn't, from an intellectual curiosity, didn't that that there were documents. 16 16 17 MR. KERRIGAN: Another matter. We will 17 bother you? Weren't you interested in that? A. No. I didn't think that there were many 18 go back to that question, but I'm in the more 18 fundamental, the basic question. 19 areas of discretion. I talked to them about the 19 20 BY MR. KERRIGAN: 20 survey. We went through the various survey

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Q. Are you suggesting that you don't think that they have a file full of information on how they put this Audits and Survey data together?

A. I assume that there were no such files because essentially I was given here -- I was in the

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me that asking the risk perception question in terms 24 of how many out of a group of 100 smokers would ge 25 lung cancer was a way that people could think about

components, and I had a pretty good understanding of

what questions were there and why. And it seemed to

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Page 55

Page 53 that risk sensibly. Q. When we leave this deposition today, before you come to trial, would you ask them for all of their work papers relative to the structuring of this survey? Will you ask them, say, "I would like to see this. I've been questioned about it, and I want to see what you had. I want to see how you've put these questions together. I want to see the order. I want to see the focus group results. I want to see everything you did before you did this survey. I want to see it all." Will you ask them

FLORIDA vs. TOBACCO

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for that?

A. I could see whether there is anything, but I'm not clear that asking them those questions would tell me more than simply doing my own survey because I --

Q. The question is, Will you ask them for that? Will you ask them to give you everything they have on how they put this survey together, all the working papers all the focus group results, all the files that deal with how they put this Audits and Survey of 1985 together? Will you ask them to show you that and to look at every file and to read every document?

A. I'm not sure it want to read every

Page 54

document. I mean, what information am I going to get out of reading every document that they wrote? What their intent is is not as important to me as whether the questions themselves are good questions. The current Audits and Survey survey essentially took my questions, my wording, and incorporated it into a new survey.

Q. We will get to that in a minute. But in truth you did that with Arnold & Porter?

A. What are you talking about?

Q. The second Audits and Survey, the revised questions were done in conjunction with Arnold & 12 Porter?

A. They did the survey but I was not involved in it.

15 Q. You did it in conjunction with Arnold & 16 17 Porter?

A. I didn't do the survey.

O. The questions.

A. I didn't do the questions. I had questions that I ran at Duke. They used those as a pattern for the kinds of questions that they incorporated in the new survey.

Q. All right. Here we are in 1985. We have 24 this audits and survey information, 3,000 and

something data points. Now we are moving on to a new

effort or an extension of that effort, are we not,

with the Audits and Survey, the second Audits and

Survey? We are moving from an extension of the first, are we not?

A. That's correct.

Q. Now, at this point, does it strike you as troublesome that now we have the law firm of Arnold & Porter involved in the structuring of the questions

in the survey? Does that trouble you intellectually 10

that lawyers are doing things that will find their 11 way into evidence some day in a trial? Does that 12

bother you? Or did it bother you when it was first

presented to you, would be a better question, I 14 15 guess.

A. I don't know that it's lawyers writing the questions. I don't know who wrote the questions.

Q. Did you ask?

A. No.

Q. Were you interested to know who is actually doing this work?

A. I don't really care who does it. I care about what the questions are and whether they are good questions.

Q. Do you think that you are academically

Page 56

qualified to assess whether they are good questions without seeing any of the working papers that were

used to develop these what you've called good

questions? You think you are academically qualified

to assess that?

A. Yes.

Q. How so?

A. I've been running surveys continuously 8 for the past decade for U.S. EPA. I'm in the field now with a risk survey. This is what I do. 10

Q. Well, this is what you do. But what we are talking about here is what they did, what Arnold & Porter did and what Jones, Day did.

MR. ATKESON: Objection, Counsel. Your 14 question to him was, Are you academically qualified 15 to tell whether or not it's a good question. 16

MR. KERRIGAN: He said yes.

MR. ATKESON: He said yes. MR. KERRIGAN: Okay.

A. WILLIAM ROBERTS, JR., & ASSOCIATES (800)743-DEPO

MR. ATKESON: So if you are objecting to

his answer --

MR. KERRIGAN: I'm not objecting to his answer at all. He said he was academically qualified, but then he said because he has done so

much work. My question was very clear, Counsel. I

CondenseIt™ VISCUSI, KIP PH.D FLORIDA vs. TOBACC Page 57 don't think there's any ambiguity. Anybody reading Porter or Jones, Day or their clients might have had for this work? It bothers you not? this transcript I don't think would reach an 2 3 A. I know the motivation. ambiguity about this. I said, but in this case the 3 work was done by Arnold & Porter and Jones Day. His O. Who told you that? 4 A. Mr. Atkeson. response was he has been conducting surveys for years 5 5 Q. What did he tell you? 6 for people. 6 A. This was simply to run an analog of my 7 MR. ATKESON: You assume an ability to 7 tell what's a good question. survey that I did for a regional sample for a 8 MR. KERRIGAN: That's okay. I understand 9 national sample. 9 O. Now wait. Whose questions were they? that. My question to him was, in this case you 10 10 Yours or theirs? didn't do the survey. That's the difference. The 11 11 A. These questions or the Audits and lawyers did it. 12 12 A. The lawyers didn't do it. Audits and 13 Survey's questions, which were patterned about how I 13 generalized the Audits and Survey 1985 survey with my 14 Survey did the survey. Duke telephone survey. BY MR. KERRIGAN: 15 15 Q. You say, "I know their motivation." My O. I understand that. But the lawyers 16 16 question was, It matters not what their motivation 17 created it, drafted it? 17 A. I'm not sure who drafted it. is. So now the question is, you say you know their 18 motivation. Was that important or not important to 19 19 O. You didn't. We know that? you to know what their motivation was? 20 20 A. That's correct. A. Whether they did it for that reason or Q. Do you assume that somebody other than 21 21 whether they did it because they wanted to keep the lawyers were directly involved in this? Other 22 than Jones, Day and Arnold & Porter, are you assuming 23 Audits and Surveys in business, I don't really care. 23 someone else got involved in this? And if so, who is All I care about is, are these good questions, was 24 the survey a good survey, and are the data that person or agency? 25 Page 58 Page 6 meaningful. A. Audits and Survey. 1 Q. Are you suggesting that they had revision 2 Q. Do you think people who are academically 2 qualified to review this data would want to know the of the questions that were prepared by Arnold & 3 Porter and Jones, Day? in the drafting of the questions? Do you think that A. I assumed that what happened is that 5 Arnold & Porter took my questions from my book in 6 in knowing that? conjunction with the earlier survey, and asked them 7 A. Who are we talking about? simply to update the survey and flesh it out a bit. 8 8 Q. The people that peer-reviewed your work, Q. So your assumption is that there is no 9 9 do you think they would want to know that? intervening agency that changed the questions? 10 10

A. I don't really care that much about the black box in the middle. I care about whether the questions that surfaced in the survey and the survey itself a good survey instrument.

Q. You've testified that you are able to reach the conclusion that these questions were good questions because of your work in other fields?

A. And my work with these questions that they essentially used as the pattern for this survey.

Q. That's fair. Based on the sensitivity at Duke with the 200 telephone calls and your other risk perception work.

A. That's correct.

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Q. That's fair. That encompasses it. It bothers you not, apparently, what motivation Arnold & 25

motivations and conduct of people that were involved the academically qualified people would be interested

MR. ATKESON: We are not talking back about 1985?

BY MR. KERRIGAN:

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Q. Whenever peer-reviewed work has been 14 15 done, whenever it was sent out there, do you think they would want to know the motivation and the people involved in the structuring of the questions? Do you 17 18 think they would want to have known that?

A. I think Jeffrey Harris might want to know that, but I'm not sure whether other people wouldn't simply look at the survey questions themselves and judge them on their own merits, which is what they should do.

Q. We are going to take a break in just a minute because we've gone for a time.

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FLORIDA vs. TOBACCO
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            MR. ATKESON: Also we have a broken
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    chair.
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            MR. KERRIGAN: Oh, I'm sorry.
            MR. ATKESON: No. It's just falling
    apart here.
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           MR. KERRIGAN: Let's take a break right
 6
    now. It's been awhile, and it's uncomfortable being
    in a chair that's breaking down.
 8
            THE VIDEOGRAPHER: We are off the
 9
    record.
10
           (A break was taken.)
11
            THE VIDEOGRAPHER: We are on the record.
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    You can go ahead and proceed.
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    BY MR. KERRIGAN:
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         Q. Dr. Viscusi, let's go to the warning,
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    although, as I understand it, you are not expressing
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    opinions in this case about the cigarette warnings,
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    or are you?
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         A. Not that I know of.
         Q. But you've done in fact some very
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    advanced or sophisticated work in warnings, haven't
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    you?
23
         A. Yes.
         Q. I want to read you a statement, and I
24
    want to ask you if you agree with this statement, and
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                                                    Page 62
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it comes from a former deposition you gave. I don't. play games, try not to, with the witness. When I quote, I'm going to tell you where I got it.

A. Which product is it?

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Q. It's just a statement, and that's what I want to ask you about. You may be able to differentiate it by product, and that's fine. Here's what you said: "Well, I indicated that in general it's the responsibility of a company that's aware of a risk to make that risk known to subsequent users of any product or any component to a product." You agree with that?

A. In a case where the product itself would not be viewed as risky but the component is, as in the case of Teflon for a TMJ joint replacement, which is I think where you are getting this.

Q. It is the Teflon case that you testified in, but it's the components of the cigarette, it's not the tobacco, it's not the loose-leaf tobacco, it's the components in the cigarette that together create the risk, isn't it?

A. The cigarettes are in my view risky based on the evidence out there. I also view that people should have perceptions regarding consumption of a product. They are aware of the risks of the

product. In fact, they overestimate the risk of the 2 products. Whether flavorings or additives or particular ingredients pose risks, to me is not consequential. What I care about is the total risk of the product, and that's what's being covered by 5 the Surgeon General's warnings, and that's what 6 people have responded to in the surveys. 7

O. You've referred three or four times in this deposition to the Surgeon General's warnings.

A. U.S. Congress. Let me correct myself.

O. What are the tobacco manufacturers' warnings? We know what the Surgeon General's warnings are because they are on the pack. What exact warnings come from the tobacco manufacturers that you know of?

A. In their ads, all these warnings are repeated.

Q. You say warnings. I want to separate for a moment the Surgeon General's warnings, okay. Are you suggesting that the tobacco manufacturers, the cigarette manufacturers, are publishing independent warnings of those required by the Surgeon General?

A. No, they are including in the ads the warnings mandated by Congress for their advertising and for cigarette packaging and which Congress has

decided are sufficient to convey to the public the risk information.

O. Well, that response I move to strike at this time. It's not only unresponsive, it's prejudicial and completely irrelevant to the question. I just pose that for the record. I don't want to get into an argument about it.

I'm back to the question, What have the cigarette manufacturers done to warn the public, independent of the Surgeon General's warnings, those warnings that Congress has required? What else have they done to warn the public about the risks of their product?

A. I can't think of anything.

Q. Do you think it's the obligation of the manufacturer to warn a consumer, or do you think it's the obligation of the manufacturer to do whatever the government requires and no more?

A. In this case the government has essentially taken over the risk communication responsibility by mandating warnings and concluding that their mandated warnings do the trick. So this is an unusual case where the government has assumed responsibility. It's not unique. FDA reviews warnings, and I view the situation there much the

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FLORIDA vs. TOBACC
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                                                                  responsibility from an economic standpoint.
    same way.
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                                                                      Q. You've answered the question from an
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        Q. Is it your testimony today that the
    cigarette manufacturers could not put on a cigarette
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                                                                  economic standpoint. I asked you if they had a moral
                                                                  responsibility. Is that the answer?
    today a warning, "This product causes lung cancer,"
    that they couldn't do that? That they are prevented
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                                                                      A. I'm an economist. As I said, I'm not a
                                                                  priest. I'm not here to give expert opinions on
    by law from doing that? Is that your opinion?
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        A. I think anything they did that got people
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                                                                  morality.
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                                                                      Q. I'm talking generally, doesn't a
    to have more accurate risk perceptions in a situation
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    where people already overestimate the risk, they
                                                                  manufacturer have the duty --
    would be criticized for it, if not prevented from
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                                                                      A. That sounds legal to me.
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                                                                      O. I know it does. I know it does.
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    doing it.
        Q. My question was very limited. Cigarette
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                                                                      A. I'm not a lawyer.
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    smoking causes lung cancer. I want to make sure that
                                                                      Q. But you've testified repeatedly about
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                                                                  duties of manufacturers, haven't you, in products
    your answer was responsive to that question. You
                                                              14
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    don't have to give another answer. If that answer
                                                                  liabilities cases?
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                                                                      A. I never testify on legal issues. I'll
    was responsive to that question, we will leave it.
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        A. I wouldn't want to put a warning on the
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                                                                  talk about what is appropriate from an economic
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    cigarettes that conveyed a certainty of lung cancer.
                                                                  standpoint, but I never try and interpret what duty
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                                                                  to warn would be from a legal standpoint.
    So I think the current I would not want to augment in
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                                                                      Q. All right. You had an option here --
    that manner.
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                                                                  looks to me as though you had an option -- to attempt
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        Q. The statement that cigarette causes lung
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    cancer you think is not true?
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                                                                  to replicate this Audits and Survey work that was
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                                                                  done in 1985. I see approximately 3,000 data
        A. I think that cigarettes do increase your
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                                                                  points. I don't know what the number is. It's close
    probability of getting lung cancer.
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                                                                  to that is, it not?
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        Q. Now --
                                                                                                                  Page 68
                                                     Page 66
                                                                      A. Yes, it is.
        A. How it's going to be processed --
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                                                                      Q. You had a chance or you had the option to
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           MR. ATKESON: Let him answer.
                                                                  go out and replicate that with the same number of
        A. -- by people is a different question
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                                                                  data points. You could have done that, couldn't you?
    because lots of people, probably many people who read
                                                               5
                                                                      A. I did this on my own. So I didn't have
    the deposition, might think that A causes B means
    that if you do A, B happens. But that's not true for
                                                               6
                                                                  funding for my replication. It was not - none of my
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                                                                  work was funded by Jones, Day or by the cigarette
7
    lung cancer. There is a probabilistic
                                                                  industry, either my own time or the time of my
    relationship --
8
                                                                  research assistant. So I did not have the resources
    BY MR. KERRIGAN:
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9
                                                                  to do anything broader than the replication.
        Q. Your testimony is that the manufacturers
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    have no responsibility to warn of the consequences of
                                                              11
                                                                      Q. 30, 40 thousand dollars probably to
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                                                                  conduct a 3,000-data-point survey would be about
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    the use of their product beyond the congressional
                                                              12
                                                                  right, wouldn't it?
    mandated warnings?
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           MR. ATKESON: Objection. Calls for a
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                                                                      A. Depending on how long you got them on the
                                                                  phone and who is in your sample.
    legal conclusion.
                                                              15
15
                                                                      Q. Could have been done, but you didn't have
    BY MR. KERRIGAN:
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                                                                  the funds to do it?
        Q. No moral responsibilities?
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                                                                      A. That's right.
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        A. I'm not a priest.
                                                                      Q. I'm going to leave for the moment what I
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        Q. The question is, No more moral
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                                                                  call the risk perception kind of discussion that
    responsibility?
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        A. From an economic standpoint, people
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                                                                  we've been involved in and go to the work that you've
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                                                                  done. As I understand it, in Florida you are going
    already overestimate the risk. Unless they have
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    information that indicates that the risk is greater
                                                              23
                                                                  to testify that what you call the lifetime analysis
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produces a net gain for the state; is that

essentially the testimony that you will be giving?

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than people are estimating and would be indicated by

the Surgeon General's warnings, they have no

Page 69 A. That's true. 1 potatoes facts. 2 Q. My question to you is, Are you surprised O. And I've seen a table that you have 2 today, or whatever your response is, that I'm telling prepared that shows how much, pardon me, each state is actually deriving in excess revenue because you that in this litigation that tobacco manufacturers are taking the position that cigarette cigarettes are causing illness and death; is that smoking does not cause illness and disease? what that table shows? 6 6 A. It has zero effect? 7 7 A. I have a table that summarizes all of the cost implications for the states in various 8 · O. Zero effect. 8 A. I may not -- I'm not sure I'm surprised 9 categories. That's right. 9 Q. But you conclude that every single state or not surprised, but that's not the view I 10 10 is, in essence, making money because people are dying incorporated in my analysis. 11 11 Q. And your analysis, as we've said, may not 12 and becoming ill from cigarettes? 12 be the only premise but certainly a fundamental A. Cigarette smokers pay excise taxes as 13 13 premise is causality? 14 well, which exceed the medical costs. 14 15 A. Yes. O. We haven't gotten into the reasons for 15 Q. Have you shared with the cigarette that, but in fairness to you you have a right to give 16 16 manufacturers through their lawyers this proposition all the reasons you reached that conclusion. I will 17 17 that fundamental to your opinion about lifetime costs surely get to that. I was trying to deal with your 18 18 is causality? general conclusion that the states in fact are, 19 19 20 A. I assume they have read my papers. counting excise taxes, counting other things, 20 actually make money because people smoke cigarettes Somebody has read my papers or seen it in the media. 21 21 It's been out there, and they, I suspect, either and then they die early? 22 22 watch TV or read the newspapers or read magazines, A. The whole cluster of things, everything 23 23 and it's been in all the media. 24 put together, yes, the states make money. 24 Q. You -- among other things we've been O. Have you discussed this issue with any 25 25 Page 72 Page 70 given a 1997, it looks to me like a draft article cigarette manufacturer executives? 1 that says something like "for circulation and peer A. No. 2 review, not for publication." Are you familiar with O. Isn't the entire premise of your work the 3 causality of smoking in illness and disease? that? 4 5 A. Yes. A. Not the entire premise, but the effect of 5 Q. Is that a rewrite of an earlier article smoking on disease and on premature mortality is a 6 6 that was not published? 7 component of the analysis. A. No. I wrote that as a separate article. O. It concedes causality? 8 8 I had no other article. 9 9 A. It assumes causality, yes. Q. And that's in the process of being Q. Have you discussed this with the 10 10 peer-reviewed now? cigarette manufacturers? 11 11 12 A. Yes. A. No. 12 13 Q. Tell me, if you will, how much of this Q. Are you aware of their position in this 13 relies on the Manning work. How much of your paper 14 litigation denying causality? 14 that you are going to publish incorporates any 15 15 A. No. findings from Manning? Q. Would you be surprised today to learn 16 16 A. I would call Manning a major building that they are denying that cigarette smoking causes 17 17 block for all of my analyses. 18 illness and disease? 18 Q. We are speaking of Wilbur Manning? 19 A. I denied that earlier depending on how 19 A. And Joe Newhouse and the rest of the Rand 20 you worded the question. So I'm talking about a probabilistic assessment that a reasonable person 21 Corporation study. 21 Q. Explain to me, if you would, how the 22 would make based on the evidence. And in my case I'm 22 using actual data on what are the patterns of 23 discount rate impacts your analysis. A. A higher discount rate places a greater 24 24 expenditures of smokers, nonsmokers, who lives, who

weight on more immediate effects than a lower

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discount rate. So the cost effects in the short term 1 have a higher weight with a high discount rate

relative to the cost effects in the long term.

O. What is the debate, if there is a debate, 4 in the literature about these social costs and the 5 discount rate? 6

A. Well, the real rate of discount for the 7 United States has been in the vicinity of 1 to 8 3 percent over the past 15 years or so. The debate in the literature is more of a theoretical debate as 10 to whether we should use an even lower discount rate 11 when worrying about public expenditures in order to 12 show a preference for the future generations. That's 13 the main debate. 14

Q. You want to give me that little tiny, tiny debate that you implicitly refer to here when you say that's the main debate? What's the little debate?

A. That's the debate I'm aware of. There may be debates concerning capital market imperfections or something else, but treasury bills are traded in a fairly competitive market. That's the debate I see. I'm not aware of any debate in the smoking literature.

Q. I'm not talking about the smoking

Page 74

literature. I said social cost consideration.

Surely you are aware of the debate that deals with

the discount rate and the variation of that rate, and 3

you must be aware of that debate relative to young 4

people, or maybe you are not, and if you are not,

that's okay. 6

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A. I'm not sure what you are talking about.

Q. Are you aware of such a discussion?

A. I already referred to a debate. Are you saying we should use a different discount rate for young people?

Q. I'm just asking you if there is a debate about that in the literature, that you can't use a 1 or 2 or 3 percent discount rate when you are talking about alternative costs for children and for youth, that there is a debate about that, that that's just not something that people just agree with you about.

A. I've never seen anybody disagree with me 19 20 on that.

Q. You haven't?

A. And I use a 3 percent rate. I've never

23 seen anybody say you should use a 1 percent rate.

24 Most people coming from the historical discount rate

literature would argue that if you want to be

1 excessively protective of young people, you want to use a lower rate than 3 percent, so we weight their futures highly. 3

Q. We are not going to have an argument or 4 debate about it, okay? We are not going to do that. That's your position. I want to make sure you understand the question.

A. I don't understand what debate you are referring to because I don't think you know.

Q. Okay. Well, you got to say that about me and I get to say this about you. I don't think you know it.

A. That's fine too.

MR. ATKESON: Let me interject here, Counsel. If there is a debate that you would like to find out whether he knows about, and if you can be more specific as to what that debate is, he may know it under a different term, or you and he may be talking about the same thing using different words. If there is some way you can characterize it, that

might be helpful. 21 22 BY MR. KERRIGAN:

> Q. Fair enough. I'm going to give you a number and ask if you've ever read it, seen it, heard it discussed at the faculty lounge at Harvard, or any

percent. Have you ever run into that number in any of the literature, in your social discussions, in

other place, okay? And the discount number is 10

your professional meetings with lawyers, read it in

economic journals? Have you ever talked about 10 6 percent?

A. Yes.

Q. Okay. How have you talked about it?

A. The government historically had mandated it for benefit cost analyses. And everybody agrees that it's too high. I don't know anybody who defends that rate.

Q. Well, now, you just indicated to me then a higher rate in which the government has taken a position and you claim nobody agrees with that position.

A. Everybody in the government disagrees with it that I know. The Council of Economic Advisers, Office of Management and Budget. I was in the government. It's viewed as, to the extent that people justify it, they believe that the agencies are going to overestimate their benefits by so much, they need a high discount rate to discipline them. And historically we got that rate because the Department of Defense initiated the rate because with a high

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Page 77 discount rate, they get to recycle and replace their weapons systems very frequently. So in part it's an artifact that was adopted for political reasons to maximize the budget for the Department of Defense. I've written that, as you may know.

- Q. Now we have what I would call the debate.
- A. No, this is not a debate. There is not a debate because everybody agrees the rate is too high. This is not a debate.
- Q. Have you ever seen 10 percent published anyplace else and discussed, other than from the office of Management and Budget?
- A. Since it's mandated for use in government analyses, you are going it to see it in some of those as well. They now do a sensitivity analysis. In fact, OMB now specifies you have to show other rates other than 10 percent.
- Q. I suppose that if we talked about 15 or 20 percent as a discount number, you wouldn't even --
- A. It's preposterous. 10 percent is preposterous.
- 23 Q. Do you think that the proposition that -let me rephrase that question. Now, in your papers 24 you used a discount rate of 3 percent? 25

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- A. I show zero, 3, and 5, and I report 3 as the midpoint. It's on the high side, but I report it.
- Q. Because if you report 5, the government is losing money? It's costing the government money, even though people are dying and they're sick and they're in hospitals, the government is still losing money if you use a 5 percent discount rate?
- A. I'm not sure that's the case. I would have to look at the numbers.
- Q. Well, why wouldn't you run that number? 11 Why didn't you? 12
 - A. I'm talking about all the states.
 - Q. All the states, Mississippi, Florida.
- 15 Why wouldn't you run the number?
- A. I did run the number. 16
- 17
 - Q. 5 percent?.
 - A. I've run zero, 3, and 5.
- 19 Q. What happens with 5 percent?
- A. I would have to look at the paper, but 20
- it's probably analogous to Mississippi. Whatever I 21
- 22 showed for Mississippi is probably fairly similar. I
- think still the states make money because of the 23 24 excise taxes.
 - Q. What about 10 percent?

A. I don't run ridiculously high discount rates.

- Q. Can you cite anywhere in the literature where zero, 3, and 5 are supported as the three discount rates that one would look at?
- A. Since this is a sensitivity analysis, I think there may be some discretion. Around the 1 to 3 percent range, people have written that the real rate of return on capital in the United States is 1 to 3 percent. You can figure this out just by looking at the spread between the treasury bill rate and the inflation rate. You can't have a discount rate that exceeds your real rate of interest. If inflation is zero, your rate of interest is the treasury bill rate. That's not 10 percent. Check
- Q. According to you, the government would have to reassess this every time there was an interest rate change. In other words, they would have to do the calculation over again because it's all going to be a function of the interest rate.
- A. The long-run rate of interest and the long-run rate of return has been fairly stable in the 1 to 3 percent rate range. So we're looking at the average rate of discount or the real rate of return

throughout the time period.

Q. What does Manning use?

A. He shows several discount rates, and he shows a continuum, as I believe. He has a chart where he shows how the costs vary with the discount rate.

Q. It's your answer that he uses several discount rates. Now I'm going to ask you, what are they?

A. I'm not sure what his several are. 1 know he has a chart that shows a continuum.

Q. Why didn't you use those rates in your sensitivity analysis?

A. I know Manning's rate -- the rates Manning places the greatest weight on are just too high. They are above the real rate of return, like a 5 percent rate is in excess of the real rate of return in the United States. He may have wanted to use that rate for whatever reason. Maybe his funding agency wanted that rate so cigarettes wouldn't be portrayed in a favorable light. I don't know. I do know his rate of five percent is too high.

Q. Are you saying that his work could have been influenced based upon desired results by the people who provided the funding?

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A. What I'm saying is if their funding agency practices focus on 5 percent, they might have wanted to see estimates based on a 5 percent rate. Or if they use a 10 percent rate, they may want to 5 see how those numbers play out at their 10 percent rate. What I'm saying, from an economic standpoint, when you are publishing in the literature, you want to focus on what the economists think is the appropriate rate, not what government bureaucrats

O. Well, that was, I think, unresponsive to my question.

think is the appropriate rate. And this was a

A. I think it's quite responsive.

government-funded study.

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- O. Because the question I asked you, and the reason I said it was unresponsive - I'm going to state the question again. And I was very precise in this question, Dr. Viscusi. It was so precise that if you want me to, I'll have the court reporter read it back. But it was this: Are you saying that Manning's work and the results that they reported was influenced by the people who provided the funding? Yes or no.
- A. Yes, but not because they are trying to 24 promote a particular agenda. I don't know that 25

Q. Dr. Viscusi, when I've asked questions in

the course of this deposition, you have made

- responses, I think, like you just did here. "I don't
- know of any economist that would differ with me," and
- things like that. Have you done any -- have you done
- any polling of people in the field? I mean, do you 6 7 say that because of the certainty of your position or
- because of some objective survey that you've done of 8
 - economists on these points?

10 A. I've read articles on the real rate of return and what the real rate of return has been in the United States, and those articles are independent

of the cigarette smoking debate. And the consensus 13

in that literature is 1 to 3 percent. I've written 14 15 an article -- I've written a study on productivity

that was issued by the Carter White House. The same 16

thing. The focal point of that was on the real rate

of return in the United States. It was in the 1 to 3 18 19 percent range. It's not 5 percent.

Q. I got to ask you the obvious question. You didn't pick 3 percent because it backed into the results that you were trying to achieve?

A. I didn't. I did zero, 3, and 5. I just 23 24 did it as a sensitivity analysis.

O. But you didn't pick 3 percent - that's

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that's the case. But yes, it could be because that

- agency may be used to using different rates of 2
- discount. That's a different question. And he may 3
- have wanted to show different rates of discount that
- were more in line with what that agency used. That
- could be a possibility. I don't know. 6 7
 - O. Dr. Viscusi --
 - A. I don't know why he did it.
- Q. Okay. And you are not able to report to 9 us today other than he used various rates, the rates that he used? You are not able to do that? 11
 - A. I don't know what went through his head other than what he has published.
- 14 O. Well, what did he publish? What rates did he use? 15
- 16 A. He published a chart with a continuum of rates, and he placed greatest emphasis on a rate 17 higher than mine, which, as I've indicated, I don't 18
- think is appropriate because my rate is more in line 19 with the real rate of return on capital. I don't 20
- think any economist not -- I don't think many 21
- economists would disagree with me. I'm not sure how 22
- many on his study might agree with him. The 23
- consensus in the literature is the real rate of 24
- return in the United States is below 5 percent.

Page 84 what you published in your paper. You didn't pick

- 3 percent to back into the results you were trying to
 - establish? You did not do that intellectually?
 - A. Right.
- Q. 3 percent was your best effort to 5 6
 - determine an appropriate discount rate?
- 7 A. I would pick probably 1 to 2 percent, but I picked 3 percent because it was intermediate in the range I looked at. So the big article I published in the NBER volume, I show zero, 3, and 5.
 - Q. And you picked 3?
- A. I emphasized that from the point of 12 discussion, but that article publishes everything. And I would be happy to put zero, 3, and 5 in this paper except for conditions and situations of lengths. My only concern was length. I would put
- greatest emphasis on 3, but I have no reservations 17 about publishing zero, 3, and 5 other than length. 18
- Q. In one of your papers -- and I can find 19 20 it. We are about to take a break here in just a
- 21 minute. You talk about social costs, and I want to make sure I don't use an inappropriate term here.
- And I noted in your Mississippi deposition your use 23
- of the word social costs. What are you talking 24
- about, social costs? What does that mean? Is that

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an economic term of art?

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A. Social costs would be the costs to society from a particular activity. The cost to people other than the smokers. So you think of private cost to the individual and social costs to others.

O. Social costs to others. What does that mean?

A. I'm excluding private costs to the smoker in my social cost tally.

O. Let me just give you a quick hypothetical and ask you where this fits into this conclusion that the state actually profits from cigarette smoking-caused illness and disease. If a 50-year-old man dies of lung cancer, who is the wage earner in his family, is that one of the - the impact on his family, is that a social cost? Is his loss of earnings potential for his family an economic cost? Is the companionship that his child loses a social cost? How do those things come out of that fact pattern? What's social and what's economic?

A. Economic costs and social costs aren't to be used interchangeably. When I'm talking about social costs in the article, I'm trying to distinguish only the fact that I'm not going to look economic effects.

O. See, I asked the question and your 2 response dealt with implied benefits of the cigarette industry. So you probably didn't understand my question. It may have been a little ambiguous. I'm

talking about the enormous cost to the state

globally, cost to the state. Not the benefits that

you just referred to. I want to talk about the cost to the state. Your analysis ignores that. You've

already pointed out it ignores some benefits that may come from the convenience stores, but I'm asking 11

about the costs to the State of Florida. Your

analysis ignores these global cost impacts to the 13 14 state?

MR. ATKESON: Counsel, I'm going to object. This is an ambiguous question. What costs are you talking about?

MR. KERRIGAN: My hypothetical example. You take the wage earner out of the household. You take his production and contribution to society. You take his earnings potential, his relationship with his children and family, just as an example. BY MR. KERRIGAN:

Q. Your analysis ignores that, doesn't it? Is that right?

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at private costs. I'm trying to look at the nonprivate cost to the individual and the individual's household. And these articles focused on the insurance costs associated with smoking.

O. So your conclusion about the net benefit to the state is devoid of any consideration of what I've just discussed with the loss of the earnings of the person that dies, their familial relationships, their contributions to society? All of those things are ignored in your analysis, are they?

A. Well, the contribution to society only insofar as it had tax or insurance repercussions. So this is just a narrow insurance analysis, as opposed to a broader benefit-cost study.

Q. You don't intend to conclude with this lifetime cost analysis subjective things like the state is better off economically in a global sense? You are not trying to conclude that, are you? You don't reach that conclusion?

A. I don't get into things like how important the cigarette industry is to your state, how important the sales of cigarettes are to your convenience stores. I'm not doing a broad economic analysis. I'm focusing on the insurance ramifications. So I'm not counting these other

Page 88 MR. ATKESON: Okay, but your question was

costs to the State of Florida. You are saying that the loss of companionship between a parent and child

is the state of Florida, or are you saying that's

something between the parent and child?

MR. KERRIGAN: Let's leave the loss to 6 the parent and child. Let's leave the destruction of the family out of this. Counsel suggested that maybe if we put that in there, it could cause you a problem. 10

MR. ATKESON: I'm not saying that would cause a problem at all. I'm asking you to clarify the question, and I would prefer you not characterize it in that way.

MR. KERRIGAN: Okay. Then I mischaracterized it, and I apologize to counsel for 16

BY MR. KERRIGAN:

Q. You are taking a myopic approach that 19 isolates three or four factors to determine that the 20 State of Florida is economically benefiting by the 21 cigarette manufacturers causing illness and premature 22 23 death; is that true or not true? 24

MR. ATKESON: Argumentative, Counsel. MR. KERRIGAN: No, again, Counsel, I

	Page 89	9	Page 9
1	really don't think that's argumentative. I said, you	1	Q. Dr. Viscusi, continuing on with the
2	are taking a myopic approach that looks at two or	2	deposition this morning, what is your hourly normal
3	three issues. If it's not myopic, maybe it's	3	billing rate or billing rate that you are billing to
4	MR. ATKESON: Counsel, it's not myopic	4	the law firms here in this litigation?
5	compared to the state's view of this that you are	5	A. For litigation-related work, \$500 an
6	only looking at one cost. He is looking at many more	6	hour.
7	things than the state is. For you to characterize	7	Q. What is testimony-type time? Is it more
8	this as myopic is unfair, and it doesn't relate to	8	or is it the same?
9	the witness's testimony. We don't need to engage in	وا	A. Same.
10	this.	10	Q. Do you know Dr. Rubin?
111	MR. KERRIGAN: Let me withdraw myopic.	11	A. Paul Rubin?
12	He may have made a reasonable I say it's a	12	Q. I think it's Donald R. Rubin from
13	reasonable objection because it's an argumentative	13	Harvard, in statistics.
14	question, perhaps.	14	A. No.
15	BY MR. KERRIGAN:	15	Q. Are you familiar with what any other
16	Q. You don't intend to conclude by this,	16	experts that have been hired by the defendants are
17	Dr. Viscusi, this basic conclusion: that the State	17	being paid?
18	of Florida as an entity that exists, comprised of the	18	A. No.
1	citizens of the state and the government of the State	19	Q. In your table that I've reviewed showing
19	of Florida, you are not suggesting that the State of	20	the costs for Florida and the costs for these other
20	Florida is better off economically because cigarette	21	states, let me read you these numbers and see if they
21	· · · · · · · · · · · · · · · · · · ·	22	sound correct to you. 33.9 in Florida and I don't
22	smoking is engaged in by the people of the State of Florida?	23	expect you to have this by memory, but I'm reading
23		24	from your chart, okay? 33.9 is the tax per pack in
24	MR. ATKESON: Counsel, again, I have to object.	25	Florida. Does that sound right?
25		+	
	Page 90	1 .	Page 9
	MR. KERRIGAN: Okay.	1	A. That's my table.
2	MR. ATKESON: Okay. If you were	2	Q. That's your table. And then I have .026
3	including in the State of Florida saying that the	3	Medicaid care.
4	State of Florida is basically a middleman for all the	4	A. Medical care.
5	citizens of the State of Florida, the witness has	5	Q. Medical care. What does that mean? What
6	already testified he has not included private costs	6	does that number mean?
7	in here. He said that. If you are asking something	7	A. The increase in medical costs for the
8	different than that, I guess I ask you to clarify	8	State of Florida are .026 cents per pack or 2.6 cents
9	it. But with regard to private costs, obviously	9	per pack.
10	individuals decide to smoke for whatever reasons.	10	Q. About two and a half cents a pack is the
111	They get some benefit of that; there is some cost to	11	medical care cost to the State of Florida?
112	that. The witness, we will stipulate he has not	12	A. That's correct.
13	included any of that in his analysis. If you were	13	Q. Going across the table, we have a deduct
14	saying, does your analysis include something or	14	number of 4 cents for nursing homes. What does that
15	should it does it not include something other than	15	mean?
16	private costs, I wish you would clarify that because	16	A. Using the but-for analysis of tracking
17	otherwise we have a very ambiguous question here.	17	smokers compared to nonsmokers, the nursing home
18	MR. KERRIGAN: Probably good time to take	18	costs of smokers are roughly 4 cents a pack less than
19	a break.	19	nonsmokers.
20	THE VIDEOGRAPHER: We are off the	20	Q. Where did you get that data?
21	record.	21	A. The building block was my article
22	(A break was taken.)	22	published in the NBER volume, which I then modified
23	THE VIDEOGRAPHER: We are on the record.	23	for the State of Florida, taking into account the
24	This is the beginning of Tape No. 2.	24	particular state-specific nursing home utilization
25	BY MR. KERRIGAN:	25	rate, the nursing home costs in the State of Florida,
	WILLIAM DODED TO B ACCOUNTED (C		742 DEDO Dego

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and other factors. O. So the source of this number is your own work? 3

A. Everything goes back to the other article, which in turn goes back to Manning as an input to that as well.

O. Okay. I didn't mean to suggest that this number was a function of your prior work. Your prior work is also a function of the materials incorporated therein, obviously. But this number, .04, comes from you and the work that

you've done? A. Yes.

Q. Okay. As it may rely on Manning or others as reflected by your article?

A. That's correct.

16 Q. Minus 7 cents, 7 1/2 cents a pack for 17 pensions, what does that mean? 18

A. The state pensions costs are reduced by roughly 7 cents a pack because people smoke as opposed to nonsmokers. Smokers save the state that money.

Q. That is clearly a death number?

A. I don't call anything a death number.

It's a number that arises because smokers don't live 25

as long as nonsmokers. They contribute to the pension plans but tend not to collect with the same frequency.

Q. And the pension plans you are referring to are what? State of Florida retirement?

A. For state employees.

Q. For state employees.

MR. ATKESON: Let me just pose an objection here.

MR. KERRIGAN: Sure.

MR. ATKESON: Counsel, this doesn't change, I think, the substance but you are asking about the wrong numbers.

MR. KERRIGAN: It's .052 instead of .074.

MR. ATKESON: Right. And the nursing

home numbers is .075 and not .044. 16

MR KERRIGAN: Indeed. Both those corrections. .075 is the nursing home number. But you have no independent ability here to give us that number. I was reading from your chart. So it really is --

MR. ATKESON: I wasn't objecting. I just 22 want to get the right numbers on the record. 23

MR. KERRIGAN: Sure. I think that's

absolutely right and I'm sorry I had the wrong column

there. BY MR. KERRIGAN: 2

Q. 7 cents is the deducting number for nursing homes. And again, the premise is that people in nursing homes who have smoked will not live as long? 6

A. Or they don't enter nursing homes at all maybe because they are already dead.

Q. And deducting 5.2 cents for pensions is State of Florida retirement?

A: Yes.

O. And that number comes from what? 12

A. My analysis.

O. Your analysis?

A. My analysis.

MR. ATKESON: Counsel, let me just -maybe you can help us here. It is my understanding that the state employees in Florida are not a part of the case. The only issue in the case is the medical care that the state is paying for; is that correct? And not the medical care of state employees?

MR. ATKESON: I'm very unhappy that you did that, but yes, that's right. Let me go on to the questions with the witness.

MR. ATKESON: Counsel, I'm just trying to

Page 94

clear up --

MR. KERRIGAN: I know, but I understand what you did, and I am very upset about that. I'm very upset. I'm going to move now for the record that this witness's testimony should be stricken based on counsel's advising the witness how to respond to this answer.

MR. ATKESON: Counsel, I have not done that at all.

MR. KERRIGAN: I think you have. I'm very straightforward about this. I think that's exactly what you did.

MR. ATKESON: Counsel, I'm being very straightforward about this as well. There is no intention to do that. I'm trying to clear up what the case is about.

MR. KERRIGAN: I don't think you are trying to clear up anything. That's unfair to have this argument on the record.

BY MR. KERRIGAN: 20

> Q. Dr. Viscusi, you have deducted .052 for pensions. You've just indicated it was for the State of Florida pensions. Why did you do that?

A. That's a cost implication for the State 25 of Florida. That's what the purpose of the article

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Page 97
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     is, to analyze the cost implications for the states.
                                                                   for example, 80-something cents --
          O. And you think that's germane and relevant
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                                                                           MR. KERRIGAN: It's off of my particular
     to this lawsuit?
                                                                    chart here. You can show him that Washington
          A. This article was not prepared for any
                                                                   number.
  5
     lawsuit.
                                                                5
                                                                           MR. ATKESON: The chart shows 81 1/2
  6
          Q. .016 taxes on earnings. What does that
                                                                6
                                                                   cents.
  7
     mean?
                                                                7
                                                                        A. Okay.
          A. Because of smokers' premature expected
                                                                   BY MR. KERRIGAN:
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                                                                8
     mortality, they will not contribute to these various
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                                                                9
                                                                        Q. The State of Washington has taxed
     state pension plans and social -- you know, the
 10
                                                                   cigarettes two and a half times about what Florida
                                                               10
 11
     Social Security, Medicare, those programs. So I only
                                                                   taxes cigarettes at, roughly. How much does the
     count the state-specific costs in this component.
 12
                                                                   State of Washington make for every pack of cigarettes
          O. Where does that number come from?
 13
                                                                   sold, according to your analysis?
                                                               13
 14
          A. My analysis.
                                                                        A. It makes both the excise tax of $1 1/2
                                                               14
 15
          Q. And you conclude for Florida that the
                                                                   cents a pack plus another 8 -- it's either .066
     state is benefiting -- correct me if I'm wrong about
                                                                   or .086. This is a fax. So 8-6 or 6-6. Either one.
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                                                               16
     this -- 8 cents for every pack of cigarettes sold?
                                                                        Q. It's 6 or 7, 8 cents a pack; is that
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                                                               17
          A. I believe that excludes excise taxes.
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                                                                   right?
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     That's just the direct insurance, Medicaid, pension,
                                                               19
                                                                        A. 7 to 9 cents a pack. It's hard to read
     sick-leave costs. You have the main column heads
                                                                   this fax. Let's call it 7 cents to error on the side
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     there, but the components are actually more
                                                               21
                                                                   of conservatism. So they make 88.5 cents a pack in
     comprehensive.
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                                                               22
                                                                   terms of the costs.
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         Q. I was going to ask you how you got to
                                                               23
                                                                        O. So that I understand the chart
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     that number from these columns, and you can't.
                                                                   thoroughly, you have gross excise taxes-plus for
         A. You can't because there are more columns
25
                                                                   Florida, 8 cents a pack for every pack sold?
                                                      Page 98
                                                                                                                  Page 100
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     out there.
                                                               1
                                                                       A. Yes.
 2
         Q. After you incorporate the rest of the
                                                               2
                                                                       Q. And I believe when you did the
    columns, you come up with Florida making 8 cents for
                                                                   calculations for every state, you concluded that in
 3
                                                                   every state, regardless of the medical care costs,
     every pack of cigarettes sold in the State of
                                                                   nursing home costs, pension costs, or taxes on
 5
    Florida?
 6
         A. That's correct. .079, I think it is.
                                                                   earnings, every state is making money, according to
         Q. This happens to be .080, but it could
 7
                                                                   your analysis, irrespective of excise tax, selling
    have been rounded in the table. We don't know?
                                                                   cigarettes?
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                                                               8
 9
         A. Right, right.
                                                               9
                                                                       A. Yes.
10
         Q. Let me just go down to look at the state,
                                                               10
                                                                       Q. Beyond this analysis, the charts and
11
    for example. Looking at this chart, I can't reach
                                                              11
                                                                   whatever we have here, does that sound absurd to you?
     any conclusion about any other state because I don't
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                                                              12
                                                                       A. No.
    have all of the columns; is that correct? You would
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                                                              13
                                                                       Q. Just intellectually does it sound absurd?
    have to have all the columns to understand on any
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                                                              14
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    other state how you got to the number you got to?
                                                              15
                                                                       Q. Do you think this is an accurate -- I
16
         A. You have the bottom line -- you don't
                                                              16
                                                                   think you have distinguished private costs not being
17
    have all the columns for any state other than
                                                              17
                                                                   considered; is that right?
18
    Mississippi in the paper.
                                                              18
                                                                       A. That's correct.
19
         O. Right.
                                                              19
                                                                       Q. And define private costs, if you would,
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         A. So Mississippi is the only one.
                                                              20
                                                                   so I know what's not in it.
21
         Q. And you don't have Florida's?
                                                              21
                                                                       A. Losses to the smoker, the smoker's
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         A. I have Florida's. I just -- it's not in
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                                                                   household. So it would include, for example, the
23
    the article. The article was not about Florida.
                                                              23
                                                                   health effects on the smoker, loss of consortium,
24
         Q. If we took another state that has a very
                                                                   whatever the effects would be on the smoker and the
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    high tax on cigarettes, say, the State of Washington,
                                                                   smoker's household. This is really focusing
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primarily on insurance costs.

O. I just want to expand private costs, what it's not including. Would private costs include the contribution that, say, the senior lawyer in a law firm would make to the productivity of that law firm with an early demise? Does it consider that?

A. No, but you would want to be consider the net private costs. So if you left the law firm and somebody else replaced you, you would want to know maybe if he did exactly the same job, was there a net cost. Maybe there was no net cost. You would want to know the net cost.

O. Okay. But it doesn't take into consideration the effect of the death of the human being would have on society, in his work, in his church or synagogue, or in his private life?

A. Only to the extent that it shows up in these financial things. That's correct.

Q. The taxes on earnings, is this add-back number supposed to reflect the discontinued contribution that the deceased would not be making because of not earning an income? Is that what that means?

A. Yes, but I did not include income taxes.

Q. And these costs that you've put down here

demean his academic credentials in some way? Why do you say that?

A. He is publishing in a different area. I publish in economics journals. He publishes in public health journals. I publish in economic areas.

O. Is one better than the other?

A. It's a different discipline.

Q. But academically they are equivalent?

A. I'm not going to get into a relative status argument. If you are an economist, it's better to publish in economics journals. It's more prestigious. It's harder to do. The standards are more demanding. That's all.

Q. Who makes that pronouncement that you just made? Who else shares that view besides you?

A. You can look at citation rates. I have social science citation index ratings in all the top 140 journals, and I'll be happy to give them to you, in terms of which of the cited journals of economics.

Q. Did you know a lot about public policy when you were 25 years old? A lot.

A. I'm not sure what a lot is.

Q. Did you have a depth of knowledge about public policy?

MR. KERRIGAN: Let's take a break for a

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are unique to the state because these are the state cigarette smoking externalities? That's the term?

A. That's correct.

Q. Okay. Have you also concluded that the federal government somehow benefits by cigarettecaused illness and disease, economically benefits?

A. Yes.

Q. And that is what benefit? Do you have a per pack number for the federal government?

A. I think -- I'm not sure what I put in this article, whether it was total society or federal government. It's just social costs, but it's quite large because they get the lion's share of the Social 13 Security benefit. So I guess I don't -- I know the 14 federal government answered, but I didn't put it in 15 the paper. I did the whole society for comparability with my other paper.

Q. Do you know whether -- you know who Ken Warner is, don't you?

A. I've never met him, but I know who he is.

Q. And I think he has published some in this field, has he not?

23 A. Primarily in public health journals, I 24 believe.

Q. What is that supposed to mean? Does that

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(A break was taken.)

THE VIDEOGRAPHER: We are on the record

BY MR. KERRIGAN:

second.

Q. My question was, When you were 25 years old, fresh out of Harvard, did you know a lot about public policy?

A. I don't know what that even means. I

Q. What does public policy mean to you?

A. I did a master's degree in public policy, 11 but what does it mean to know a lot? Did I know as 12 much as Richard Neustat? No. There are senior 13 people I didn't know as much about --14

Q. I guess my question was, when you graduated from undergraduate school at Harvard -- by the way, you've gotten all your degrees at Harvard, haven't you?

A. Yes.

Q. When you got your undergraduate degree at 20 Harvard, did you know a lot about public policy? 21

MR. ATKESON: Okay. So now we are asking

23 different than 25.

MR. KERRIGAN: He has a made a

25 differentiation in his response, something about a

			1 BORDA VS. 1 OBACK
}	Page 105	5	Page 1
1	master's degree.	1	you are going to get lung cancer? Yes or no? Is
2	BY MR. KERRIGAN:	2	that such a shockingly bad question to ask? Why
3	Q. So let me ask you the question: How old	3	wouldn't you ask it?
4	were you when you graduated from Harvard	4	A. Let's say the lung cancer probability
5	undergraduate school?	5.	is .1, and you go out and ask the survey question,
6	A. 21.	6	"Do you think you will get lung cancer," and
7	Q. Okay. When you were 21, did you know a	7	everybody says no, because the probability is
8	lot about public policy?	8	below .5 for everybody. I don't think that tells you
9	A. I read the paper. I knew a lot about the	9	as much as asking where below .5 your probability is
10	Bureau of Reclamation, which is one agency within the	10	Q. Well, now, Dr. Viscusi, when you are
11	Department of Interior, but I'm not sure that gives	11	taking these surveys, people don't understand
12	me a breadth of knowledge.	12	probabilities. They are just answering the questions
13	Q. Did you have a degree of confidence in	13	that are asked, right?
14	your knowledge regarding public policy when you were	14	A. That's not true. The purpose of the
15	21 years old, after you graduated from Harvard?	15	question is to get people thinking in a way that gets
16	A. I think there is a whole continuum. I	16	them to understand the probabilities, and that's what
17	knew something about public policy. I was not	17	this one in a hundred or X in a hundred question
18	generally ignorant, but I didn't know as much then as	18	does.
19	I know now.	19	Q. You are not telling the people about
20	Q. Do I understand that the Audits and	20	probabilities. You are simply asking the question to
21	Survey work that's been recently done has been	21	obtain a response from them that gives you accurate
22	published or not published?	22	data in which you can make certain predictions.
23	A. Not published.	23	That's why you are doing this, right?
24	Q. Did you have any problem with the	24	A. These are probabilistic questions about
25	question, any concern about the question in the 1985	25	probabilities. The question you posed is not a
	Page 106		Page 1(
1	survey: Among 100 cigarette smokers, how many of	1	probability question. So it loses much more of the
2	them do you think will get lung cancer because they	2	information that I can capture with a more refined
3	smoke? Did that cause you any concern the way that	3	question such as this.
4	question was phrased?	4	Q. As an economist now, this deposition
5	A. No. I've changed the question.	5	transcribed, circulated to your peers, you are
6	Q. Did you do that just for fun, or did you	6	telling us today that this question in this survey
7	do it because the earlier question presented a	7	was more refined than the question I just asked?
8	problem?	8	Better question?
9	A. I did it so that I would address not	9	A. Much better question.
10	simply getting lung cancer but also lung cancer	10	Q. Would you ever include any questions
11	mortality risks, total mortality risks, life	11	about what the individual thought about themselves
12	expectancy effects. So I wanted a more richer set	12	when dealing with their risk perception, or is that
13	of risk measures than were picked up in that	13	just ridiculous to think you would do that?
14	question.	14	A. I've done that in a workers survey that
15	Q. Did it trouble you that the question	15	was a written survey, where I gave them a linear
16	asked about others and not about the respondent?	16	probability scale to mark the probability. But in a
17	A. Unless you can clone yourself 100 times,	17	telephone survey, this is the analog of that.
18	I think it's hard to ask 100 how much how many out	18	Q. You've done just exactly what I just
19	100 people exactly like you would get cancer. That's	19	said. You used the questions that I just said. You
2 0	not as easy a question for people to relate to as 100	20	dealt with the individual's perception of the risk to
21	smokers.	21	themselves?
22	Q. I will agree with you that's an absurd	22	A. Yes.
23	question. Let me state my question again and not ask	23	Q. What I'm asking you is wouldn't that be
24	for the should exection being solved. 37/hetic emens	1 1 4	an annuaminto thing to de if con an emile - to

for the absurd question being asked. What's wrong

with asking somebody, if they smoke: Do you think

an appropriate thing to do if you are trying to

25 understand someone's true risk perception, is what

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they think would happen to them if they smoked, not what they think is going to happen to somebody else if they smoke. Wouldn't you agree that's the best way to determine their risk perception?

A. I have no reason to believe that this question as worded doesn't get at the same thing.

- Q. My question to you was, isn't it a better way to do it the way I just did it, a most logical way to do it?
- A. Not in a telephone survey it's not better.
- Q. What exactly is it that goes on over the telephone that makes that not possible?
- A. You are not going to present somebody with a linear risk scale and ask him to mark on the scale what the probability is. So you can't run a little probability training course. And you can accomplish the same thing by asking him with respect to a reference population of 100 and that shortcircuits the need to do that. People can think very easily in terms of percentages and odds out of hundred.
- Q. You didn't think it was a little suspect
 that all the questions that preceded this question
 among the 100 cigarette smokers, "How many of them do

record reflects it's not what I know, what I believe, or what I understand. What he has written in a book that he's published that he cites as authority for his testimony is fine. I'm just saying when he makes comments like "as you know," there is a suggestion we are all in this intellectual agreement arena, which we're not there.

MR. ATKESON: He wasn't doing that and no need to take umbrage at it, and we can go on.

MR. KERRIGAN: Good.

BY MR. KERRIGAN:

Q. Do you think there is any basic logic to the idea, especially with young people, that other people might get sick from smoking, but it's not going to happen to me? You think there is some of that out there?

A. I've heard people claim that that's the case. Some antismoking advocates would say that's the case.

Q. Dr. Viscusi, if people disagree with you, do you label them antismoking advocates just because they disagree with you?

A. These people aren't disagreeing with me. They are writing their own view. I'm just saying these are the kinds of things they might say.

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you think will get lung cancer because they smoke," • you didn't think that was kind of a set-up question based on the previous questions in the survey? I mean, you are setting up a response, is what I'm suggesting, intentionally skewing the survey results is exactly what I'm suggesting happened.

A. I ran the survey without anything preceding it, and it didn't affect -- my results were very comparable, as you know. So I don't think it did skew the results.

Q. Well, as you keep adding these asides, I have to respond. You say "as I know." I do not know any such thing. That is your testimony. I accept it as your testimony, but it is not what I know or what I believe, okay? What do you think --

15 MR. ATKESON: Counsel, Counsel, let me 16 just stop. What the witness said there is as you 17 know about what he has written. He is not commenting 18 on your beliefs. He is saying you know how he asked 19 his survey because he details it in his book. Now, 20 if you haven't read that, then you are right, you 21 don't know it, but he is not commenting on your 22 knowledge. He is saying what you know about him. 23

MR. KERRIGAN: That was very unclear from

his response. So I wanted to make sure that the

Page 112 Q. I'm asking you if intellectually honest people might conclude, in just a conversation, others are more likely to get sick from smoking than me?

A. If that's -- well, I don't know about the relative probabilities, but if it's true that people really don't think it's going to happen to themselves, then these probabilities would not affect smoking rates. And my research documents the fact that these risk perceptions that people have actually do affect whether they smoke.

Q. I understand your conclusion. We are going to get to that in a minute. Your "which causes which" conclusion. You say the risk perception is what causes them to smoke. That's one of your views, is it not?

A. People with lower risk perceptions are more likely to smoke.

Q. Again, citing your own work for the authority on that?

A. Yes.

Q. Dr. Viscusi, I noticed in this 1997 paper that there are many footnotes and parenthetical references to your work to support the 1997 paper. Is that something that you do normally in your publications? Bootstrap your current work by

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Page 113 referencing your former work? A. No. 1 A. If I'm the only person who has worked on 2 2 Q. Do you know what he did for a living? a topic and has published the leading things on a 3 A. He was a tobacco baron. topic, I would certainly do that. And to the extent 4 Q. Do you know how the university's I'm building on my past work, of course I would do 5 endowments were created? 6 it. A. He gave them money many, many years ago. 6 7 Q. I have no question about building on your 7 Q. Do you think tobacco has attempted to influence academia by grants? past work, but citing previous work as authority for 8 an affirmative statement in a paper, is that A. I don't know what they are doing. They 9 9 something that you normally do? 10 10 have not made any grants to academia that I'm aware A. If it's the best evidence out there, I'll of, you know, to me. 11 11 cite it. If it's not the best evidence, the journal 12 Q. Do you know that the tobacco industry makes awards and grants to various universities for reviewers will tell me that. 13 13 O. Back to the journal reviewers. Your research and other works? 14 14 position is that if you get it published, there is an 15 A. I know they have endowments of various 15 kinds. So they used to endow professorships that affirmation of its intellectual integrity? 16 16 17 A. No, that's the first screen. Then it 17 would have nothing to do with tobacco, or endow a sits out there in the literature. lecture hall. 18 18 Q. Do you have any idea if the tobacco 19 Q. Do you think that when this industry 19 interests might have some input to the publishers? gives money to academia, it has no interest in 20 20 21 Do you know that? 21 influencing the output of academia in any respect? 22 A. I know they have no input to these 22 A. Yes, I think it's just goodwill. If you publishers. 23 endow the R.J. Reynolds professorship at the Duke 23 24 Q. How do you know that? 24 business school, I believe the person who holds that A. Journal of Political Economy is run by has nothing whatsoever to do with cigarettes in their 25 Page 114 Page 11 the University of Chicago and the University of research. Chicago Press. These are - Review of Economics and 2 Q. I'm not saying they are not sophisticated Statistics is run by the Harvard University in this respect. What I am asking you is, do you Department of Economics. They would not take -- I believe that the money that's given by the tobacco know -- it's just preposterous to think that they industry to academia is given without any intent to would discuss whether they'd publish my article with influence the output from the academic community? I the tobacco industry. you believe that, that's fine. A. I don't know what their interest is, but Q. Preposterous to think that? 8 8 9 A. Yeah. These are independent academic I know that Duke University would not accept money in 9 journals, the most prestigious journals in order to influence the work of its faculty, to 10 10 economics. They are independent journals. 11 promote the interests of any industry. 11 12 Q. Okay. So you believe that the 12 Q. I just asked you if when they make a publication of the material that you have published grant, do you think that they have any interest in 14 somehow bootstraps its reliability -- not trying to influence the output of that very subtly, 14 bootstraps -- somehow is reinforced in its very subtly? 15 15 scientific validity, if you will, because of this 16 A. I don't know what their thinking is. 16 17 peer-review process and editorial review. You've 17 Q. Why did you pick North Carolina to do said that repeatedly. Am I paraphrasing it this sensitivity analysis of 200 phone calls? Why 18 19 correctly? 19 did you do that in North Carolina? 20 A. It's certainly better to publish than not 20 A. That's where I lived. 21 to publish. There is no question about that. 21 Q. That wasn't my question. 22 Q. Do you know how Duke University got its 22 A. I was paying for it myself. 23 name? 23 Q. That could be the whole reason.

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Q. Do you know what his nickname was?

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A. James B. Duke.

for it myself, and it's not a long-distance call.

A. That's where I lived, and I was paying

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O. So the long-distance phone charges were a factor?

A. I was just doing a robustness test, and I thought, if anything, North Carolina would be a situation where if there is a bias relative to other states, people would underestimate the risk, relative to, let's say, Massachusetts.

O. Underestimate the risks because they live in North Carolina?

A. Right.

Q. And they underestimate those risks why because they live in North Carolina?

A. Well, in Durham, you don't get tobacco farmers. But if you happen to get a tobacco farmer you are calling, you might get a different answer than if you are calling an antismoking advocate in Boston. So it's a different mix of people. And North Carolina is a leading tobacco- producing state.

Q. So the people in North Carolina, the 200 people that you called, had the same risk perceptions as the Audits and Survey of '85?

A. Similar for lung cancer risk perceptions, and then I extended it to mortality risk assessments and life expectancy loss, which was not included.

O. Did you ask the tobacco people, the

because it was in the postwarnings era for cigarettes, and they already had legal immunity.

Q. Why did you keep writing to them and 3 asking them for the data?

A. I wanted to analyze it as a researcher. And I didn't want to have to pay for a survey myself. This is a survey that was free. 7

Q. And you -- the thought didn't enter your mind that if you put this information out in a publication and could get it peer-reviewed, that you might be a very valuable witness to the tobacco industry? That never crossed your mind?

A. No, because I thought they had legal immunity from risk perception issues.

O. Why do you think that -- I'm going to say Jones, Day picked the question about lung cancer? Whoever actually picked it, why do you think they wanted the question asked about lung cancer unless it was calculated to achieve an overassessment of risk? Why do you think they picked lung cancer?

A. Lung cancer was the first major risk category identified in the 1964, or so, HEW report on lung cancer, so it had been a prominent risk associated with cigarettes, and I believe the main reason they picked it is that this survey was

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Jones, Day or Arnold & Porter, to let you use an 800 number?

A. I had nothing to do with them at that time. I had nothing to do with them for many years -- I think years before then, and I didn't want any funding for my work. I didn't seek any funding. I just wanted to do it independently.

Q. You had been receiving checks of some kind or another from this industry for a decade, haven't you?

A. Well, it's over a decade since I did any work for them, but I did not have a continuing working relation with them, and I had no anticipation that I would work with them again.

Q. My question was, For over a decade you've received money from the tobacco industry through their lawyers?

A. I'm getting paid now. I got some money in the 1980s, but that's not the same thing as being continuously receiving money for a decade.

O. When you picked up on this Audits and Survey business for publication, did you suspect you might be a person in high demand to be hired by the tobacco people?

A. I didn't think my work was relevant

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undertaken in connection with the Cippolone case, which dealt with lung cancer. So they wanted to just have an assessment that was case-specific.

O. It wasn't introduced in Cippolone?

A. This is why I was told why they did the survey. I don't know where it was introduced, but this is the information I was given that they asked about lung cancer because it pertained to lung cancer litigation.

Q. And you don't think it was because there was so much literature, so much public discussion about lung cancer, that they picked it intentionally to try to skew the risk perception numbers up? You don't think that's why they did that?

A. No, I think they picked it because it fit the litigation. As I pointed out, that you do get greater overestimation of risk with lung cancer than with total mortality risk.

Q. Let's ask this question. Let's ask the question: From 100 smokers how many of them will get Berger's disease from cigarette smoking? Would you care to opine on what the answer might be?

A. Hamburger's disease? See, I don't think that means anything to people.

Q. You misunderstood what I said.

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- A. No, I didn't misunderstand it. If you ask people on the phone, they might. 2
- 3 Q. Dr. Viscusi, just a second. I understand 4 you don't know the medicine. It's not hamburger's disease; it's Berger's disease. 5
 - A. I heard Berger's disease.
 - Q. Berger's disease.
- A. I heard it. Excuse me. But if you are 8 asking people on the telephone, they are not going to know what Berger's disease is either, and they are 10 11 going to click into something they do know, which is like hamburger's disease. In other words, you don't 12 ask people in a survey question medical terminology 13 that they don't understand. Period. 14
 - Q. Dr. Viscusi, maybe I'm just too thick to understand this. How can you understand risk if you don't even understand the disease? How could you assess risk on Berger's disease?
- A. I'm not trying to assess risk for 19 20 Berger's disease.
- 21 Q. Well, if you are trying to understand the 22 public's perception of risk from cigarette smoking 23 and there is epidemiological evidence that Berger's disease comes from cigarette smoking, why wouldn't 24 you ask that as a test question in this survey?

from lung cancer wording is not a big difference.

2 Getting lung cancer versus dying from all causes of mortality is a big difference. They asked the lung 3

- cancer specific question because I was told that this survey related to lung cancer litigation. 5
- 6 Q. You took a publication, a survey that lawyers did, according to you, in conjunction with 8 litigation. You knew that's why it was done. Did

you think that might be suspect?

A. I thought, if anything, they would err on the side of having an unassailable survey instrument because they knew it would be involved in litigation. and they knew people would be after them.

Q. Did you ask questions like why in the world didn't you go to a prestigious independent entity, pose the basic information that you wanted pursued, that is, true risk perception, give them all the data that you had, and ask somebody to do it independently? Did you ask them why they wouldn't approach it that way as opposed to phrasing the questions the way they phrased them?

A. I didn't ask that question.

Q. Have you read Dr. Schoenbaum's work, his paper? I think you referred to it earlier, but you didn't mention it by name, University of California.

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A. I'm not interested in the specific diseases. I'm interested in the overall mortality risk perception. And being dead is a severe enough outcome so that if people think there is a very high probability they are going to be killed by smoking, I can be reasonably confident that they think there are adverse health consequences associated with smoking.

- Q. Well, then, why in the world didn't they ask that very question?
 - A. What question?
- Q. What you just said. How many people are going to die from lung cancer? That would be the bell ringer. Why didn't they ask it?
 - A. I did.
- Q. Why didn't they ask it in '85? Why did they word this question this way when you just gave the obvious question to be asked? Why did they word it this way?
- A. Get lung cancer as opposed to die from 20 lung cancer?
 - Q. You are the one that brought up dying as the risk we want people to understand. This question doesn't ask about dying. It says people are going to get lung cancer.
 - A. To get lung cancer wording versus the die

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A. I've only had a chance to thumb through it. I haven't had a chance to read it thoroughly. So I don't remember his risk perception question. I know it was not my question. Something about maybe survival rates until age 75 or something.

Q. Before I leave the risk perception, I don't know how I got back to this because I wanted to take about your lifetime earnings, but the risk perception honestly is interesting to me. Do you think that children 16 and 17 years old have a greater risk perception than appropriate for cigarette smoking-caused illness and disease?

A. Children -- age 16- to 19-year-olds. based on the survey evidence, have a higher risk assessment than do the older age groups, and it's considerably higher than any government assessments of the risk.

Q. In laymen's terms, the 16- and 17-year-olds, they overestimate the risks to themselves of smoking cigarettes, overestimate it?

A. I don't know about 16- or 17-year-olds. I know that 16- to 19-year-olds --

Q. Let's take that group. That's fair. 16to 19-year-olds. They overestimate the risk to themselves from cigarette smoking, according to you?

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- A. For the lung cancer risk assessment, that's the only group for which I've broken out that age group.
- O. So you've never tested anything but lung cancer?
 - A. For that age group.
- O. For that age group. Let's just stay with lung cancer. You are saying that 16- to 19-year-olds overestimate the risk of lung cancer --
- A. Yes. 10

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- O. -- to themselves. Why didn't you go and break out that group to really test the cognitive dissonance kind of component here? Why didn't you check that? Why didn't you do it for the more expanded survey?
- A. Well, I did. The way they get a cognitive dissonance with those type of effects from an economic standpoint is to see whether these risk beliefs on the part of 16- to 19-year-olds are just is powerful in influencing their smoking probability as risk beliefs are for older age groups. And my statistical analysis shows you can't reject the hypothesis that 16- to 19-year-olds are affected in 23 the same way by their risk beliefs as older people are by theirs. So they are just as powerful. And if

Page 127 O. Do you know anything about the medicine and injuries that occur to young people in that age group? 3

A. I track accident statistics, if that's what you mean.

- Q. Do you know anything about head and neck 6 injuries to people in that group, motorcycle accidents, diving accidents?
 - A. Drunk driving?
 - Q. Drunk driving accidents.
 - A. I've seen some statistics, published statistics.
 - Q. And --
 - A. There are some risks in that group. Also they do engage in types of activities where they might be exposed to greater risk as well.
 - O. We've gone over this several times, but I'm still struggling with it. If you are trying to assess a person's understanding of risk, you don't think it's appropriate to ask questions related to 20 different illnesses and diseases that the epidemiology says is causally related to cigarette smoking, you don't think that's necessary or appropriate? A. Exactly.

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- there were cognitive dissonance, they would not have
- this effect.
 - Q. When I say to you as a layperson, 16-, 17-, 18- 19-year-olds think they are bulletproof and nothing bad is going to happen to them, it's going to happen to the other guy, you would say that's not true about smoking and lung cancer?
 - A. I think it's not true generally. I think a lot of research has shown that a lot of the myths concerning that age group are just that. They are myths.
 - O. What's the myth?
- A. The myth of adolescent invulnerability. 13 Adolescents do not view themselves as invulnerable. 14
 - Q. As a group?
- A. As a group. 16
 - Q. So when you tell a PTA group or something that don't worry, 16-, 17-, 18-, 19-year-olds, they don't think they are invulnerable, they don't think they are bulletproof, we've got a lot of scientific evidence that shows that they -- if anything, cigarette smoking, they overestimate the risk -that's what you would tell people?
 - A. I think generally that age group has been given a worse wrap than they deserve.

Q. And you don't think that because the risk perception on lung cancer is higher than the actual risk? 3

MR. ATKESON: Objection; mischaracterizes his previous testimony.

BY MR. KERRIGAN:

Q. Okay. Let's straighten that out, then.

How am I wrong about that?

A. Let's take the total mortality risk and the life expectancy loss associated with mortality. If people believe that the mortality risk from cigarette smoking is high, and if they also believe 12 the length of life they are going to lose if they die is also high, then that risk perception alone will create a very strong disincentive not to smoke in 15 terms of having the full effect of the risks. 16

O. I'm not sure I understand that, so I'll ask the question again. You may have been very responsive to it and I just didn't understand it. If you listed 180 diseases that are caused or exacerbated by cigarette smoking, many of which lead to painful and agonizing death, and that information is published by the manufacturer -- I want you to assume they just publish that information -- and it's disseminated widely in the media, it will have no

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impact on risk assessment by the populace. Is that your testimony?

A. I didn't say that in the previous 3 answer. What I said is if you are trying to measure whether people's risk perceptions are accurate, 5 provided that I'm asking about sufficiently severe 6 expected health effects that are at least as severe 7 as the expected health effects that you would construct using your scientific evidence with detailed questions, as long as people believe the 10 expected health cost to them is as least as great as 11 what a scientific study would say using this whole list of diseases, then I've done all I need to do to show that people think that the expected health costs 14 to them are at least as great as they actually are, 15 based on the science. 16

O. Now I would like to give you the opportunity which I think you wanted to have -- I hope you have -- and that is to tell us everybody in the field that would subscribe to what you just said. Just name the people who have published in the field that would subscribe to what you just said here.

A. I don't think anybody would -- I don't care what anybody would do. I know if I give people people are. Your peers, people you've discussed this with at the Harvard professors club, wherever these people are, or are you the only person in the world that is espousing this? I'm trying to be straightforward with you. Who else would agree to

the things you've testified to? MR. ATKESON: Counsel --

MR. KERRIGAN: And you are grinning and you think it's funny, and I don't think it's funny. I don't think it's humorous at all.

MR. ATKESON: Counsel, let's not -- I'm 12 not grinning.

13 MR. KERRIGAN: You were. You were, but 14 that's okay. People grin all the time. I don't care if you grin.

MR. ATKESON: Counsel, let's keep this civil. Let's you and I have a quick discussion here.

MR. KERRIGAN: Okay.

MR. ATKESON: I would like to find out if what you are asking him is who would agree with the statement that when you want to take a survey, that if you ask a sufficiently general question, you don't need to ask the specific question. Is that's what you are asking him who agrees with him? Or are you

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a lottery with a severe health outcome and say this is the probability of death, and they assess the expected health costs and say the expected health costs are at least as high as all these components, then I'm done. It doesn't matter how many friends I have.

Q. My question is who else would support that. I want to know their name, I want to know if they are tenured professors. I want to know where they are in the United States or in the world that would subscribe to what you just have sworn to under oath here. Who is that person and where are they that they would agree with what you said?

A. So I'm supposed to trot out a professor? The leading economist at the Kennedy School, Professor Richard Zeckhauser, I'm sure he -- you know, he doesn't know what I just said, but I'm sure he would agree with it.

19 Q. He doesn't know what you just said and he would agree with what you just said. Good. We are 20 going to depose him. I'm telling you, we are going to ask leave of court to depose anybody in this country or the world that would subscribe to what you told us here today under oath. That's where we are going with this, and I want you to tell me who these

asking him with regard to the specific smoking

question, you know, does somebody agree with the

specific smoking question, I think he has testified that people are not aware of what he said on the

specific smoking question. But you also, you know,

say to the witness, "I'm going to depose anybody you

answer," you know, the witness has got to decide do I want to say any names to you, because he knows that

you are going to blame him then for any hassle you

put those people through. 10 11

MR. KERRIGAN: It's not a hassle. I mean, we're --

MR. ATKESON: Taking a deposition of someone who is completely unrelated to this case is a hassle.

MR. KERRIGAN: I'm just trying to find out if there's anybody with any intellectual honesty or integrity in this country, truthfully.

MR. ATKESON: Is that generally, is there anyone with any intellectual honesty in this country?

MR. KERRIGAN: Wait. That would agree with the things that he has just said here. I'm just trying to find out. I would like to have them raise their hands. I'm going to go depose them, and I want to read back the answers that this witness has given

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to people who are respected in the field and say, "Do you subscribe to what this man has testified to under 2

oath relative to smoking?" If they say yes, great. 3

If they say never, then I think we are making

progress on our side of the case, okay?

MR. ATKESON: He gave you the name of someone, and your response was, well, does he know what you said, and he said no, but if he did know, he thinks he would agree. Would you like him to give the names of those types of people?

A. Also, before I give names, I would like to have an agreement as to what we are asking them so I can get that in writing. You give me -- in other words, if we're asking them, if I ask if there is a probability of death, is doing that adequate, as opposed -- and people give a sufficiently high probability indicating that they're high expected anticipated costs associated with smoking, is that sufficient, or do I have to ask about the component risks? If that's the nature of the question, write it down. I'll give you some people, but I don't know who is paying these people. BY MR. KERRIGAN:

23 Q. That's interesting and I appreciate that, 24 but here is what I'm asking, is, who would subscribe

to what you are saying about disclosure of risk in a. survey relative to smoking? Who would subscribe to that. I'm not interested in the general proposition once you know death, you know the worst. I'm talking about what you've testified to here under oath quite unambiguously, that it is unnecessary to disclose anything other than lung cancer is a cause of death, to accurately assess risk perception of illness and disease with smoking.

MR. ATKESON: Objection, Counsel. That's not what he has testified to. He testified to there was a big difference between a lung cancer only question and the total mortality question. He said that total mortality question is the question he wants to ask. And he says if he asks that, then it's not necessary to ask the individual components. If you want to go back, we can have all of those answers and questions read back.

19 MR. KERRIGAN: We are going nowhere with 20 this.

21 BY MR. KERRIGAN:

22 O. I'm going to ask one more time. One more time. Other than the tobacco industry, do you know 23 of anybody that would subscribe to or agree with what you are testifying to here today about risk

perception being adequately tested by the disclosure

of a question about lung cancer and the specific

exclusion of any other illness and disease? Do you

know anybody that would subscribe to what you've said

here? And we are going to depose them and we're

going to give them the same information and ask them if they agree with you.

A. I don't subscribe to that, what you just said. That's not what I subscribe to.

Q. Well, tell me what you subscribe to.

A. Mr. Atkeson expressed it quite well.

Q. I would rather have you tell me your words instead of a lawyer.

A. I was prefacing it to try and let you know that we've said this before, and I've said it before, and he has said it before.

Q. I don't really care what he says.

A. Let me finish my answer. If you don't 18 want to hear my answer, let's take a break. Do you 19 want to take a break, or do you want me to talk? You 20 21 pick it.

Q. No, but I --

A. Wait. You decide. I'll talk or I'll 23 break. I'm breaking. Excuse me. I'm breaking. 24

Q. We have an agreement you could break

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Page 136 anytime you want to, and we could absolutely do 2 that.

THE VIDEOGRAPHER: We are off the 3 record.

(A break was taken.)

THE VIDEOGRAPHER: We are on the record.

Q. I'm going to review some testimony that you've given in Mississippi, and just ask you if this is correct or not, and we will go through this fairly quickly, that you have no notes from any meetings with the lawyers regarding the questions -- and the framing of those questions for the survey?

A. That's correct.

Q. I don't believe you've read any of the other experts' depositions in the Florida case, or have you?

A. I've not read any depositions.

Q. That you believe that the cigarette industry could not improve the public's understanding of the risk of cigarette smoking by changing the

warning labels on a cigarette packs? 22

A. I think the warning labels are mandated by Congress, and anything they would do to get people to the closer -- to the accurate risk perception would not be permitted.

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)	Page 137	'	Page 13
. 1	Q. Things like cigarette smoking causes	1	taxes on cigarettes and that falls shorts of a ban,
2	emphysema, cigarette smoking causes lung cancer,	2	and there they had smuggling problems with their
3	cigarette smoking causes illness and disease,	3	analog of Native Americans. You unleash a whole
4	cigarette smoking causes Berger's disease, cigarette	4	illegal market in cigarettes, and I would prefer to
5	smoking causes cancer of the rectum - you don't	5	buy my cigarettes, if I were to buy them, from Philip
6	think warning labels like that would increase the	6	Morris rather than through the future analog of a
7	public's perception of risk?	7	drug dealer.
8	A. In terms of getting the risk belief	8	Q. You don't think Philip Morris is a drug
9	closer to the accurate more accurate risk belief	9	dealer?
10	number, no.	10	MR. ATKESON: Objection, argumentative.
11	Q. In other words, it won't change it. If	11	BY MR. KERRIGAN:
12	anything, it might bring it down?	12	Q. You used that question. I don't mean to
13	A. It might increase the risk perceptions,	13	be argumentative at all. Are you familiar with their
14	but that would be bad because they already	14	publications that they are selling a drug?
15	overestimate the risks.	15	A. Philip Morris is not selling an illegal
16	Q. What we don't want to do is we don't want	16	drug. Whatever it is they are selling, it's not the
17	to scare the public any worse than they are scared?	17	same thing as selling cocaine.
18	A. The objective of risk information is to	18	Q. You're saying the difference is between on
19	portray risk as honestly as you can, not to alarm the	19	an illegal drug and a legal drug.
20	people.	20	MR. ATKESON: Objection.
21	Q. And you think that these warnings that	21	Mischaracterizes his testimony.
22	I've just talked about, very explicit warnings, would	22	BY MR. KERRIGAN:
23	tend to alarm people?	23	Q. Is there a difference between an illegal
24	A. I think they might confuse people as well	24	drug and a legal drug?
25	and the problems of information overload and blank	25	A. Whatever they are selling, they are
	Page 138		Page 14(
1	stares when they see Berger's disease.	1	selling a product that the United States government
2	Q. You think they might want to ask what is	2	does not object to them selling. They have the right
3	it?	3	to sell this product. It's not illegal to sell this
4	A. That's not the way you write a warning,	4	product.
5	to write a warning that asks gives people	5	Q. We know. We have heard that from others
6	information that they can't comprehend in the hopes	6	that it's not illegal to sell the product, but my
7	that they are going to run off to Encyclopedia	7	question to you is when you refer to the black
8	Brittanica.	8	market, are you saying that Philip Morris is not in
9	Q. You believe that there are a number of	9	the legal drug business? Is it your testimony that
10	people in this country that are engaged in an	10	they are not in the legal drug business?
11	antitobacco crusade. I think you referred to that,	11	A. They sell cigarettes. Cigarettes contain
12	haven't you?	12	nicotine. You can label it whatever you want. I've
13	A. I don't think I've said antitobacco	13	never used the phrase "legal drug business," and I
14	crusade in any published writings. I may have said	14	won't.
15	it in a deposition.	15	Q. Is it a drug to you?
16	Q. Who are you referring to?	16	A. That's a medical judgment. I don't deal
17	A. There are a lot people that want to ban	17	in medicine.
1	cigarettes, period, as opposed to fostering accurate	18	Q. You made this statement in the
18	risk beliefs.	19	Mississippi deposition: "Well, except for the Audits
19 20	Q. Do you think it would be a good idea to	20	and Survey data and the way I redid the risk
21	ban cigarettes or a bad idea?	21	question, nobody else in the literature that's
22	A. Bad idea.	22	published has asked the questions in a meaningful
22	Q. Do you base this opinion solely on	23	way. And since no other academic has done it
24	economics and not on medicine?	24	correctly, I would be surprised if the company did.
25	A. In Canada they have raised the excise	25	So I would be a surprised if it was a study of the
	WILLIAM ROBERTS IR & ASSOCIATES (8	L	

FL	OKIDA VS. TOBACCO	Condens	seit viscusi, kip ph.i
	F	age 141	Page 143
1	same caliber as the kinds of studies that I'm rely	ying 1	Q. I think you are quite correct. They are
2	upon." Did you make that statement?	2	2 talking about risk perception.
3	A. Yes.	3	3 A. Yes.
4	Q. Do you stand by it today?	4	
5	A. Yes.	5	5 A. All I'm saying is that I've shown that
6	Q. No caveat?	6	6 people overestimate the risk.
7	A. No caveat.	7	7 Q. Okay. What was the precipitous cause of
8	Q. You made this statement: "My positions	8	8 your involvement with the tobacco industry or Jones,
9	are not going to be swayed by internal company	9	9 Day in 1985? What caused you to come in contact with
10	studies." Same statement today? Any caveats?	10	0 them or the tobacco industry in a professional
111	A. No caveats.	11	1 capacity?
12	Q. Same statement today?	12	2 MR. ATKESON: Did you say '95 or '85?
13	A. I know of no information, internal	13	3 MR. KERRIGAN: 1985. I'm sorry.
14	company studies that would sway me.	14	4 MR. ATKESON: That's okay.
15	Q. That wasn't the question. Here was the	15	
16	question. "My positions are not going to be swa	ived 16	
17	by internal company studies." Do you state that		
18	today and are there any caveats?	18	
19	A. I cannot envision any internal company	19	
20	studies that would sway my opinions.	20	
	Q. You made this statement: "The value I	21	
21	would place on anybody else's studies, whether		· · · · · · · · · · · · · · · · · ·
22	the tobacco industry or anything else, would be		
23	because I already have the studies that have nail		·
24	down this effect. I know the answer."	25	
25			
		age 142	Page 144
]	A. What effect are we talking about? Let's	-	1 at the time?
2	give the context.	-	2 A. R.J. Reynolds.
3	Q. Here is the question: "Isn't it fair to	1	Q. Do you own any tobacco company stocks?
4	say that without having the benefit of seeing any	l l	The state of particular particular and particular parti
5	such studies in the possession of the tobacco	i	5 Craft, might have it.
6	industry about risk perception by the public, you		6 Q. Okay. Have you ever made the statement
7	not in any position to really evaluate whether the		7 at any time in the past that the tobacco industry
8	studies would be of any use to you in formulating	I	8 would never subscribe to your lifetime analysis work
9	your opinion?"	'	9 because it admits causality?
10	Your answer was: "The value I would	10	
11	place on anybody else's studies, whether it's the	1	
12	tobacco industry or anything else, would be zilc		· · · · · · · · · · · · · · · · · · ·
13	because I already have the studies that have nail		· · · · · · · · · · · · · · · · · · ·
14	down this effect. I know the answer."	14	
15	A. I've asked the questions in all the	15	
16	diverse ways that I think are meaningful, and I'm	m 16	. , , , , , , , , , , , , , , , , , , ,
17	quite happy with the results. I'm not yes, I	17	7 recall writing anything to that effect.
18	would not be influenced by tobacco industry stu	idies. 18	
19	Q. Do you subscribe to that answer that you	19	9 that?
20	gave to that question in the Mississippi deposition	on? 20	A. Repeat exactly what I suppose
21	A. Yes, where the effect is that people	21	Q. Yes, that the tobacco industry would
22	overestimate the risk and I've shown that, yes.	22	never support or adopt your lifetime cost analysis
23	That's the effect we are talking about. We are r	ot 23	because it assumes causality?
24	talking about my other research. This is the	24	A. I've never said that. In fact, the fact
امد	context. I'm trying to define the context.	25	that I'm here today would seem to indicate that
25	context. I in trying to define the context.	1	,

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level research.

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somebody in the tobacco industry believes in my lifetime analysis.

Q. Really, I wasn't dealing with what somebody else believes as evidence of anything. I was simply asking you if you made that statement. I understand you've reached a conclusion from that, but I'm asking if you've made the statement that the tobacco industry will never embrace this lifetime approach because it assumes causality.

A. I have said they have never embraced it. That's different from saying they have never been willing to adopt it. This is not the kind of analysis they would adopt with enthusiasm, and that's what embrace would mean.

Q. Okay. Have you referred to yourself as a psychologist at any time?

A. I work with psychologists, but I've never said I was a psychologist.

Q. Have you ever held out that you've done any work in psychology to anybody for any reason in the past?

A. I've done work on the psychology of risk perception. So my work would be indistinguishable from that done by a lot of psychologists. I work with psychologists. I coauthor with psychologists.

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I run a journal that we publish papers by psychologists.

Q. I think you've referred to yourself as being on the leading edge of cognitive psychology.

A. No, no. I do work that intersects with cognitive psychologists, but I'm not a cognitive psychologist. I'm an economist.

Q. My question was not what you are or not. I just said that you said, "I'm on the leading edge of cognitive psychology."

A. I don't recall ever saying anything exactly like that. I've worked with leading cognitive psychologists.

Q. Let me just read to you from your testimony in Sarah Sawtell versus DuPont. This is 15 the case we talked about earlier. From page 15 of 16 the transcript you've, in a narrative response, which I'll be glad to show you the whole response, "If you read the blushers on some of my forthcoming books, you will find that I'm at the cutting edge of cognitive psychology in some of my work."

A. Some of my work the cognitive psychologists think is right at the forefront of their field as well. That's all that means.

Q. Okay. Just wanted to know if you said

it. You are not an expert in addiction pharmacology,

toxicology, biochemistry, or any of those fields? 3

A. That's correct.

Q. You made a comment about behaviorists, that -- let me quote -- "That it's usually an insult in economics to call somebody a behaviorist. It means that they don't have any skills." Was that one of the things you say and later you think that wasn't really appropriate, or do you stand by that today?

A. I'm not saying that's what I think, but behaviorists --

Q. That's not what you think?

A. I don't believe that behaviorists 13 necessarily have no skills. In fact, I publish 15 papers in my journal that might be called 16 behavioral. But in terms of the profession at large, they view people who analyze real data with sophisticated econometric methods as doing higher 18

Q. Here was the question: "But are you what is commonly known or referred to as a behaviorist?" Here was your answer: "That's usually an insult in economics to call somebody a behaviorist. It means that they don't have any skills."

A. It means that you can't do conventional

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economics. You become a sociologist or something

Q. But you still subscribe to that statement that you make?

A. If you are not recognized as a mainstream economist and you are only a behaviorist, generally you are not viewed as being one of the cadre of main economists who practice the art of economics.

Q. Okay. So it's an insult to someone that is an economist to be called a behaviorist?

A. If you can only publish in the Journal of 11 Behavioral Decisions or similar types of journals, 12 that's not as good as being able to published in 13 14 recognized journals. 15

Q. Okay. Good. You were asked about the Audits and Surveys at page 71 here of your Mississippi testimony. Question: "This audit, what did we call it? The Audits and Surveys that was done in the early '80s, it was done at the commissions of Jones, Day law firm, one of the law firms that represented the cigarette manufacturers, correct?"

21 22 Your answer was, "That's correct." Question: "And

23 you do understand that that study was commissioned in 24 connection with or in anticipation of litigation in

25 support of the tobacco industry's position,

		1	
	Page 149	1	Page 151
1	correct?" Your answer was, "Yes." No change today?	1	A. No. He must be a slow worker.
2	A. No.	2	Q. Ten years?
3	Q. You were asked, "Do you know what the	3	A. Ten years.
4	industry's position as to risk perception is today?	4	Q. I think it's nearly a thousand pages.
5	Do you know what it is?" Your answer was, "To the	5	MR. ATKESON: Of notes, is that what you
6	best of my knowledge, it would be that the public	6	are saying?
7	understands whatever risks there might be associated	7	MR. KERRIGAN: Text is a thousand pages. BY MR. KERRIGAN:
8	with smoking." Do you still stand by that today?	8	Q. But you never read the book?
9	A. Yes.	9	A. Never read the book.
10	Q. Do you consider your research work	10	
11	controversial, in risk perception?	11	Q. You have no interest in reading it?
12	A. It's innovative and breaks new ground.	12	A. I have interest in doing my own research,
13	And usually when you tell people things that are	13	not in reading a book about the industry.
14	surprising, that's controversial.	14	Q. You don't think it would help to know
15	Q. I was interested to note in your	15	what the industry has done or not done in terms of
16	testimony in Mississippi that you had never read the	16	release of public information on the issue of risk
17	Brown & Williamson documents. Have you read them	17	perception?
18	since then?	18	A. I don't see how that would affect my
19	A. No.	19	analysis in which I use the Surgeon General's
20	Q. Are you interested in them?	20	estimates as a reference point and see how close
21	A. Only if I have time to read them.	21	people are to that.
22	Q. Have you heard anything that was revealed	22	Q. It would be inconsequential to you that
23	in those Brown & Williamson documents that you	23	the cigarette industry may have misrepresented the
24	thought might be worth reading or following up on?	24	consequences of smoking, underestimating risk? That
25	A. No.	25	would be inconsequential to you?
	Page 150		Page 152
1	Q. Now, you made this statement: Question: •	1	A. So long as people overestimate the risk
2	"Is the manufacturer of a product in general the	2	compared to the best scientific reference point,
3	best source of information about the product?" Your	3	that's the focus of my work, and that's all I'm
4	answer was, "No. I've indicated it's not always the	4	testifying on.
5	best source. I just said that." Do you still say	5	Q. Okay. Inconsequential?
6	that?	6	A. It's a different question.
7	A. It depends on the context. Sometimes the	7	Q. Do you think they have deliberately lied
8	manufacturer is, sometimes the manufacturer isn't.	8	to the American people for the last 30 years about
9	Q. A number of books have been written about	9	what they knew about their product? Yes or no?
10	the cigarette industry. You testified at	10	MR. ATKESON: Objection. Assumes a fact
11	Mississippi, and without going through them all, that	11	not in evidence. MR KERRIGAN: No I want to know
12	you hadn't read any of them. Are there any books	12	MR. KERRIGAN: No, I want to know.
13	that you've read about the cigarette industry that	13	MR. ATKESON: When you say deliberately
14	you can recall today?	14	lied, you are assuming that they lied, and that's
15	A. About the industry itself as opposed to	15	lied, you are assuming that they lied, and that's it's either
16	cigarette economics?	16	BY MR. KERRIGAN:
17	Q. Let's not deal with cigarette economics,	17	Q. Okay. I want you to assume that they
18	just the industry. Cigarette Papers by Glantz,	18	deliberately have lied to the American people for the
19	Kluger's book Ashes to Ashes, Smoke Screen by Phil	19	past 30 years as an assumption in the hypothetical
20	Hiltz, have you read any of those books?	20	question, and that the truth, if revealed, would show
21	A. No.	21	causality, would demonstrate enormous problems with
22	Q. Do you know that Richard Kluger took ten	22	cigarette smoke for illness and disease. I want you
23	years to research the tobacco industry and has all of	23	to assume that in the hypothetical. Would it ever
24	his research materials on reserve in the Sterling	24	affect risk perception?
25	Library at Yale? Did you know that?	25	A. We already have warning labels that do
		1	DEPTS IN A SCOCIATES (SAN)742-DED

Page 15

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communicate enormous risks.
                                                                       A. Yes.
                                                               1
                                                                       Q. What is the truth that you are referring
         Q. You did some regression analyses, you
 2
     said, and I think you did on flat feet, didn't you?
                                                                  to here that they could convey to people in a
                                                               3
 3
    The flat foot question?
                                                                  convincing way?
                                                                       A. I don't know the exact truth, but I
         A. That would be one of the variables that
                                                               5
 5
                                                                  believe in my smoking book I give a smoking mortalit
     could go into the analysis.
 6
                                                                  risk range of between .18 to .36. Maybe one-fifth to
         Q. Do you know what propensity scoring is?
 7
                                                                   one-third chance of dying from smoking, based on the
                                                               8
 8
                                                                   best available scientific evidence.
         Q. When you did this regression analysis did
                                                               9
 9
     you use off-the-shelf regression software?
                                                                       Q. And you are saying if that was conveyed
                                                              10
10
                                                                  to the people, they would believe that smoking is
         A. Yes.
                                                              11
11
         Q. What did you use?
                                                              12
                                                                  less risky than they do now?
12
         A. I don't know. SAS, LIMDED, or STATA.
                                                              13
                                                                       A. Because the people in general believe
13
                                                                  that smoking is riskier than that.
                                                              14
     One of the three.
14
                                                              15
                                                                       Q. I understand, but this statement that you
         Q. Okay. The ones commonly used?
15
                                                                  made is accurate?
         A. Right.
                                                              16
16
                                                                       A. Yes.
         O. Has anybody ever told you that those
                                                              17
17
    regression analyses in that software are inherently
                                                                       Q. And you subscribe to it today?
                                                              18
                                                              19
                                                                       A. Yes.
19
     unreliable?
                                                                       Q. You went on to say, "Right. If they
         A. No, nobody has ever told me that.
                                                              20
20
21
         Q. Would you be interested to know that
                                                              21
                                                                  provided accurate risk information in a convincing
                                                                  manner, it would decrease the public's risk
    Dr. Rubin has testified to that in this case on
    behalf of the tobacco industry?
                                                                  perception." I think that's the same thing.
                                                              23
23
                                                              24
                                                                       A. Yeah.
         A. If you get similar results -- if I run
24
    the same regression with SAS, LIMDED, and STATA, then
                                                             25
                                                                       Q. I believe that you have concluded that
                                                    Page 154
                                                                                                                  Page 15
                                                                  national survey data is appropriate for use in an
    I would have substantial confidence in them. There
                                                                  individual state?
    are regression packages that have errors. LIMDED has
                                                               2
                                                                       A. For what?
    errors, for example. And you call up the people lots
                                                               3
 3
    of times to try to find out what the error in their
                                                                       Q. By economists. Using national survey
                                                               4
                                                                   data, that you can reach reasonable conclusions based
    program is. So they are not foolproof.
 5
         Q. It wasn't necessary for you to do a
                                                                   on national survey data for a state. Mississippi,
 6
                                                               6
    propensity scoring in order for you to rely on the
                                                               7
                                                                  Florida, New York.
 7
                                                                       A. If I were to tailor-make the data to the
 8
    regression scoring that you did?
                                                               8
         A. I don't use propensity scores.
                                                               9
                                                                  state, I would want to say here is the national
 9
         Q. In fact, you don't even know what it is,
                                                                  survey information, and I would adjust the
                                                              10
10
                                                                   demographic characteristics to match those of the
11
    do you?
                                                              11
                                                                  state and then project out what the risk perceptions
12
         A. Exactly.
                                                                  would be, and that would be a reasonable estimate,
13
         Q. I'll say as an aside, you may not be
                                                              13
14
    alone in that respect but Dr. Rubin has testified
                                                              14
                                                                  but it would ignore any state-specific factors other
    about it. Let me go to page 105 of your Mississippi
                                                                  than demographics.
15
                                                              15
    testimony. You said, "If the tobacco industry could
                                                                       Q. Is it your testimony today that you said
16
                                                              16
                                                                                                                      51696
    provide full information in a convincing manner to
                                                              17
                                                                  essentially that in your Mississippi deposition?
17
18
    people, it would lower their risk perceptions." The
                                                              18
                                                                       A. I may have said that.
                                                                                                                      თ
19
    question was, "What do you mean by lower their risk
                                                              19
                                                                       Q. And you may not have said that?
    perceptions?" Your answer was, "People now believe
20
                                                              20
                                                                       A. I still believe it now. If I said it
    the risk is higher than scientists estimate it be.
                                                                  before, I believe it now. If I didn't say it before
21
                                                              21
22 If the tobacco industry could convey the truth to
                                                              22
                                                                  this is what I believe.
23
    people in a convincing way, people would believe that
                                                              23
                                                                       Q. After the lunch break I'm going to read
    smoking is less risky than they do now." First of
24
                                                                  you exactly what you said in Mississippi and then ask
                                                                  you if your testimony today is any different. Do you
    all, did you say that?
25
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CondenseIt™ VISCUSI, KIP PH.D FLORIDA vs. TOBACCO Page 159 think your testimony you just gave now is different smoking? that the testimony you gave in Mississippi on that A. Of course not. 2 issue using national survey data? 3 MR. ATKESON: Counsel, let me just ask. A. Depends what you are talking about. So I it's a little after 12. don't know the context. MR. KERRIGAN: We got another hour. 5 O. You made a comment that there has been a probably. So it would be a good time to break. 6 national campaign against the cigarette industry. THE VIDEOGRAPHER: We are off the Page 106 of your deposition. And it was in response 8 record. to what do you attribute the reason for that to be, 9 (A lunch break was taken from 12:02 p.m. 9 which dealt with risk perception would have been 10 to 12:49 p.m.) 10 lower in the '80s than it was in the '90s. I think THE VIDEOGRAPHER: We are on the record. 11 11 that's the context of that. You went on to say there BY MR. KERRIGAN: 12 has been a national campaign against the cigarette Q. We are back after a lunch break, and 13 13 we've all taken our coats off because of the industry. Is that your belief? 14 temperature in the room, and, Dr. Viscusi, are you A. Yes. 15 15 ready to continue the deposition at this time? Q. Who do you think is running that 16 16 17 A. Yes, I am. campaign? 17 Q. In regards to any responses that you made A I don't believe it's -- it has a specific 18 18 head, but it's become politically correct to oppose this morning, do you wish to elaborate upon any of 19 19 those responses? Let me move my mike up here. the cigarette industry, and lot of people are going 20 20 to profit from opposing the cigarette industry. 21 A. It's both warm and rainy. 21 Q. Right. That's the thunder from the area Q. A lot of people are profiting by being in 22 22 we are at here. Dr. Viscusi, do you wish to add, the litigation. 23 23 24 deduct, or further elaborate on any answer you gave A. That's right. 24 O. Some of them are \$500 an hour. 25 before our lunch break today? 25 Page 160 Page 158 A. Some of them. A. I can't think of any changes. 1 Q. Okay. Good. You made the statement, and Q. You are not the cheapest and you are not 2 I believe you have today too, that the role of hazard the most expensive, if that makes you feel any communication should be to foster accurate risk 4 better. perceptions. 5 A. Makes me feel worse. 5 6 Q. You were asked about the public's 6 A. That's correct. awareness of the contents of cigarettes, and I think O. You do not believe that it would enhance 7 it's safe to say that you do not think that would the accuracy of the risk perceptions for the public 8 have any impact on risk perception; is that correct? 9 to understand exactly, A, what's in a cigarette, and 9 B, what illnesses or diseases are caused or A. No, I didn't say that. I said it 10 10 exacerbated by cigarette smoking? wouldn't necessarily make the risk perceptions more 111 11 A. I think excessively detailed information accurate. 12 12 that went through the components of cigarettes would 13 Q. I'm sorry, wouldn't make them more 13 not further their understanding and would cause accurate. Understanding what these chemicals are in 14 14 cigarettes and how they come from the combustion 15 problems in information overload. 15 process and all that wouldn't help the public 16 Q. In an economic analysis of -- and I 16 understand? 17 realize we've gone back and forth here between these 17 18 two areas, but if there is any question about that, A. I think it's more complicated than you 18 19 want to get in a warning. 19 you can always ask me. Do you understand the concept Q. You still think lettuce is carcinogenic, of loss of years of productive life? Have you ever 20 20 21 and is it at the same level as cigarette smoking? 21 heard of that before?

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A. Never said the second thing, but Bruce

Ames, the leading cancer scientist, said lettuce is

carcinogenic. I'm just taking his results.

Q. Okay. Is it equivalent to cigarette

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you haven't heard of that?

A. Loss of years of work life.

Q. Okay, but the concept of productive life,

A. I've heard of quality-adjusted life

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years.

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2 Q. The concept of the loss of years of life in terms of the contribution that life may have on the economic welfare of the state is not included in your lifetime analysis; isn't that right? Other than 5 the add-back for taxes.

A. If smokers earn less money and pay lower contributions to pension plans, for example, is that what you are talking about?

O. I'm talking about the impact on the economic welfare of the state when a 50-year-old man who is involved in a wage-earning capacity is killed or dies from cigarette smoking-caused illness or disease. Your lifetime analysis does not take into consideration other losses that the state incurs by virtue of his death?

A. Depends on how you define losses. If you are defining losses as the gross domestic product of the state, including income of all of the state members, that's correct, I'm excluding income loss to the individual once the individual is dead; whereas 21 that would show up in the gross domestic product of the state.

Q. You are saying the income loss would show up on the individual basis, but it would not be -- it

A. They are wrong in the sense their perception is too high, on average.

Q. So they don't smoke and they may have reached that conclusion based on erroneous perception of risk?

A. That could have affected their decision, yes.

Q. Let me see if I understand this statement and if it's still your testimony. People with lower risk perceptions regarding an activity will be more likely to do it?

A. Yes.

Q. Seems intuitive; people with lower risk perceptions would be more likely to do it?

A. That's correct.

Q. But now you've concluded that smokers have lower risk perceptions not because they smoke but because they perceive the activity to be less risky?

A. That's right.

Q. And you don't accept the proposition that because they smoke, they think it's less risky? Because they are actually smoking cigarettes, lighting them up and smoking them, they think, hey, it's not as bad as other people say it is?

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would be a wash in the gross domestic product of the state?

A. No, I'm not. I'm saying if an individual dies, and let's say that person is not replaced in the state, then the gross domestic product of the state drops, but that's not what I'm measuring. I'm looking at the budgetary costs, not the gross domestic product effects.

Q. I think you've testified that smokers have a lower risk perception than nonsmokers?

A. That's true.

Q. And I think your statement has been that they are closer to being accurate on the risk assessment than nonsmokers?

A. That's true as well.

Q. Do you think people who don't smoke, then, perceive cigarette smoking to be much more harmful than it is?

A. They perceive it to be more harmful. I'm not sure what "much more harmful" is.

Q. They perceive it to be more harmful than 21 22 it is.

24 Q. And those nonsmokers are dead wrong about that perception, aren't they? They are wrong?

A. I can reject that hypothesis statistically.

O. How?

A. By running endogeneity tests to see if smoking affects risk beliefs. In other words, I can do that in terms of a statistical analysis, analyzing the smoking risk perception linkages.

Q. Have you done that and published that?

A. I've published that for the 1985 Audits and Surveys data. I've not published it for the 1997 data because I just got it recently.

Q. Do you know of anybody that has accepted what you call your proof, your statistical proof? And what we are talking about is that smokers, by virtue of the fact that they perceive smoking to be less risky, start to smoke?

594 A. Well, it's in published books and published articles, and if the referees did not accept it, they would have let me know that when they reviewed the papers.

Q. You keep talking about the referees and the peer review and all these external sources to support these opinions you have. Would you give us names of some people that have done peer review so we might contact them and ask them what they knew about

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the data that you supplied that was not in the article. 2

- A. The peer review process is a double blind -- at least a blind process, not double blind, for most of these. So I don't know the identity of the reviewers and they are not released to me.
- Q. Right. So we don't have anybody's names, do we?
- A. That's the idea of a blind review process, so they can say what they think, and I won't know who they are.
- Q. Have you ever had a publication submitted that's been rejected by any journals?
 - A. Yes.
- O. Let's just take the last five years. 15 Tell me how many publications you submitted and how 16 16 many have been rejected and which journals. 17
 - A. I don't remember, and I'm not going to try and reconstruct this right now. I don't remember. But most of my things are published the first time out. And everything I write, I publish.
 - Q. Are you suggesting that when a publisher rejects your publication based on a peer review rejection of the article, that you will submit it to a journal that's kind of like a little step down from

Page 165 A. Ever, on anything.

Q. I think you've answered that. You don't know in the last two or three years.

A: I can't -- well, I cannot remember a single paper that I've written in the last two years that was flat out rejected by a journal. That's not not knowing. I cannot know. I've published a lot, I've submitted a lot. I think everything is either a revise and resubmit or is an acceptance. I can't think of a rejection.

- Q. You went on to say in your answer that you publish a lot.
 - A. Right.
- Q. I asked you on smoking and risk perception I know four articles and a book. Is there something else out there that you've written on smoking and risk perception in addition to four articles and a book?
- A. Yes, I have two papers submitted to journals right now, and they are both submitted to journals for the first time.
 - Q. I'm talking about what's been published.
- A. I don't know the count. I will have to look at my resume, but I've got Review of Economics and Statistics, Journal of Political Economy, the

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that and try to get it published there?

- A. Not always. Could be a different emphasis, and I may revise the paper, send it to a comparable journal.
- O. You are unable to tell us today articles that you have submitted - let's just say in the last two years -- that have just been rejected out of hand, sent back to you: We will not publish this?
- A. I can't think of any that have been rejected flat out in the last two years.
 - Q. What about in the last three years?
- A. I don't know -- you know, I publish an enormous number of articles. What was the last two years versus the last three years and four years, I don't keep tabs on.
- O. The best I can determine, you published about four articles and you've written a book on smoking and risk perception. And I don't see tons of articles. Am I missing something about that?
 - A. I've written about 200 papers.
 - Q. On smoking and risk perception?
- A. No. 200 papers total. You asked have I written any articles that were rejected.
- Q. We've gone to another series of questions.

Poterba-edited volume, The Supreme Court Economic

Review, the National Tax Journal. I've got Journal of Human Resources on smoking and seat belts. So I can name at least six off the top.

O. Are there others? What's your smoking and seat belt article?

A. People who smoke and people who don't wear seat belts are more willing to work on risky jobs. They are riskier people.

O. I'll just have to ask you a question or two about that. Are you saying people who smoke and don't wear seat belts?

A. Either one. Individually people who smoke, individually people who don't wear seat belts. They could be smokers or nonsmokers.

Q. But the conclusion is people who smoke and who don't wear seat belts take more risky jobs?

A. Let's do them one at a time. People who smoke are more willing to work on risky jobs. People who don't wear seat belts are more willing to work on risky jobs than people who do wear seat belts. So we analyzed each of these effects.

- Q. How did you describe risky jobs?
- A. Based on the annual injury rate using the Bureau of Labor Statistics injury scale.

	Cond	CHSC	FLUKIDA VS. TOBACC
1	Page 16	9	Page 17
1	Q. What conclusion did you reach from that	1	you not, addictive and habituation and whatever?
2		2	It's all the same?
3	interest in this lawsuit? Is there anything we can	3	A. I'm not going to draw a distinction
4	get from that that helps us?	4	because I'm not a physician. I'm not going to get
5	A. Yes.	5	into these distinctions because from an economic
6	Q. Tell me what it is.	6	standpoint, as I discussed in that deposition, what
7	A. Smokers have shown themselves to be risk	7	we mean by all these things is that there is a cost
8	takers in other contexts of their lives and have	8	to changing the activity.
9	different risk-money trade-offs than nonsmokers.	9	Q. Once again, at page 133 you said, "They
10	They are more willing to bear risks than are	10	know that cigarette smoking is hard to quit once you
11	nonsmokers.	11	stop, which is the practical consequence of the
12	Q. Does that mean economic risk or does that	12	addicted drug terminology for their lives." Did you
13	mean physical labor risk?	13	mean once you start or once you stop?
14	A. Physical health risks. They are more	14	A. Once you start smoking, it's hard to
15	willing to incur a health risk than are nonsmokers.	15	quit.
16	Q. Is it implicit in that is a	16	Q. Okay. And if you stop smoking, it's hard of
17	recognition that smoking is bad for your health?	17	to stay abstinent of smoking?
18	A. No, I'm just saying if you are smoker,	18	A. Quitting is not easy, even once you've
19	are you more willing to work on a hazardous job than	19	stopped.
20	a nonsmoker irrespective of whether smoking is risky.	20	Q. The Fourth Circuit Court of Appeals in
21	And the answer is, yes, smokers are more willing to	21	Florida today issued an opinion that will require the
22	endanger themselves on the job than are nonsmokers.	22	disclosure of the Liggett documents. Are you
23	They require less compensation.	23	familiar with that issue?
24	Q. Is that a contributor to early mortality?	24	A. I know Liggett has documents. I don't
25	A. Could affect it, yes.	25	know what's in them.
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	Page 17/	NI .	Dog 17'
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]	Q. May not be the smoke. Might be the risky	1	Q. If there are disclosures in the Liggett
2	Q. May not be the smoke. Might be the risky job?	1 2	Q. If there are disclosures in the Liggett documents that the tobacco companies have fought
2 3	Q. May not be the smoke. Might be the risky job? A. It could.	1	Q. If there are disclosures in the Liggett documents that the tobacco companies have fought vigorously to avoid having disclosed and they are now
2 3 4	Q. May not be the smoke. Might be the risky job?A. It could.Q. You think there is adequate risk	1 2 3 4	Q. If there are disclosures in the Liggett documents that the tobacco companies have fought vigorously to avoid having disclosed and they are now disclosed, can you tell us ahead of time what effect
2 3	Q. May not be the smoke. Might be the risky job? A. It could. Q. You think there is adequate risk perception information on the addiction issue?	1 2	Q. If there are disclosures in the Liggett documents that the tobacco companies have fought vigorously to avoid having disclosed and they are now disclosed, can you tell us ahead of time what effect that will have on risk perception?
2 3 4 5 6	Q. May not be the smoke. Might be the risky job? A. It could. Q. You think there is adequate risk perception information on the addiction issue? A. I think that people know that quitting	1 2 3 4	Q. If there are disclosures in the Liggett documents that the tobacco companies have fought vigorously to avoid having disclosed and they are now disclosed, can you tell us ahead of time what effect that will have on risk perception? A. If the press characterizes it as the
2 3 4 5 6 7	Q. May not be the smoke. Might be the risky job? A. It could. Q. You think there is adequate risk perception information on the addiction issue? A. I think that people know that quitting cigarettes is hard to do.	1 2 3 4 5 6 7	Q. If there are disclosures in the Liggett documents that the tobacco companies have fought vigorously to avoid having disclosed and they are now disclosed, can you tell us ahead of time what effect that will have on risk perception? A. If the press characterizes it as the cigarette industry was hiding dangers that people
2 3 4 5 6 7 8	Q. May not be the smoke. Might be the risky job? A. It could. Q. You think there is adequate risk perception information on the addiction issue? A. I think that people know that quitting cigarettes is hard to do. Q. I think you previously equated that to	1 2 3 4 5 6 7 8	Q. If there are disclosures in the Liggett documents that the tobacco companies have fought vigorously to avoid having disclosed and they are now disclosed, can you tell us ahead of time what effect that will have on risk perception? A. If the press characterizes it as the cigarette industry was hiding dangers that people still don't know about now, then that would increase
2 3 4 5 6 7 8 9	Q. May not be the smoke. Might be the risky job? A. It could. Q. You think there is adequate risk perception information on the addiction issue? A. I think that people know that quitting cigarettes is hard to do. Q. I think you previously equated that to addiction?	1 2 3 4 5 6 7 8 9	Q. If there are disclosures in the Liggett documents that the tobacco companies have fought vigorously to avoid having disclosed and they are now disclosed, can you tell us ahead of time what effect that will have on risk perception? A. If the press characterizes it as the cigarette industry was hiding dangers that people still don't know about now, then that would increase risk perceptions. So it depends on the character of
2 3 4 5 6 7 8 9	Q. May not be the smoke. Might be the risky job? A. It could. Q. You think there is adequate risk perception information on the addiction issue? A. I think that people know that quitting cigarettes is hard to do. Q. I think you previously equated that to addiction? A. Whether you label it addiction or	1 2 3 4 5 6 7 8 9	Q. If there are disclosures in the Liggett documents that the tobacco companies have fought vigorously to avoid having disclosed and they are now disclosed, can you tell us ahead of time what effect that will have on risk perception? A. If the press characterizes it as the cigarette industry was hiding dangers that people still don't know about now, then that would increase risk perceptions. So it depends on the character of the report.
2 3 4 5 6 7 8 9 10	Q. May not be the smoke. Might be the risky job? A. It could. Q. You think there is adequate risk perception information on the addiction issue? A. I think that people know that quitting cigarettes is hard to do. Q. I think you previously equated that to addiction? A. Whether you label it addiction or habituation is more of a medical terminology issue	1 2 3 4 5 6 7 8 9 10	Q. If there are disclosures in the Liggett documents that the tobacco companies have fought vigorously to avoid having disclosed and they are now disclosed, can you tell us ahead of time what effect that will have on risk perception? A. If the press characterizes it as the cigarette industry was hiding dangers that people still don't know about now, then that would increase risk perceptions. So it depends on the character of the report. Q. Let's just say the press publishes the
2 3 4 5 6 7 8 9 10 11	Q. May not be the smoke. Might be the risky job? A. It could. Q. You think there is adequate risk perception information on the addiction issue? A. I think that people know that quitting cigarettes is hard to do. Q. I think you previously equated that to addiction? A. Whether you label it addiction or habituation is more of a medical terminology issue not one of practical significance. The important	1 2 3 4 5 6 7 8 9 10 11	Q. If there are disclosures in the Liggett documents that the tobacco companies have fought vigorously to avoid having disclosed and they are now disclosed, can you tell us ahead of time what effect that will have on risk perception? A. If the press characterizes it as the cigarette industry was hiding dangers that people still don't know about now, then that would increase risk perceptions. So it depends on the character of the report. Q. Let's just say the press publishes the truth. They just publish the notes of counsel and
2 3 4 5 6 7 8 9 10 11 12	Q. May not be the smoke. Might be the risky job? A. It could. Q. You think there is adequate risk perception information on the addiction issue? A. I think that people know that quitting cigarettes is hard to do. Q. I think you previously equated that to addiction? A. Whether you label it addiction or habituation is more of a medical terminology issue not one of practical significance. The important thing is that people understand that quitting smoking	1 2 3 4 5 6 7 8 9 10 11 12 13	Q. If there are disclosures in the Liggett documents that the tobacco companies have fought vigorously to avoid having disclosed and they are now disclosed, can you tell us ahead of time what effect that will have on risk perception? A. If the press characterizes it as the cigarette industry was hiding dangers that people still don't know about now, then that would increase risk perceptions. So it depends on the character of the report. Q. Let's just say the press publishes the truth. They just publish the notes of counsel and the documents and the public reads them. Can you
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been published yet?

A. Exactly.

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- O. You don't know what effect it's going to 3 have? 4
 - A. I can't tell you what effect information will have if I don't know what the information is.
 - O. Can you think of any information that if the public knew about it, just hypothetically, would cause their perception of the risk to increase? Information from the cigarette manufacturers.
- A. I can think of lots of information that 12 might increase the risk perceptions, but that's not our objective. Our objective is to have people have accurate risk perceptions, not to scare people. I can think of lots of information that would not foster more accurate risk beliefs.
 - O. Can you think of anything that would foster more accurate risk beliefs where that risk is greater than people now think it is?
 - A. We have evidence that the risk is not greater than people now think it is, based on tracking the mortality risks of smokers compared to nonsmokers. So we already know the answer to that question. So I don't see how you are going to get people to increase their risk beliefs to a more

Page 174 accurate number since people already overestimate the risk relative to the evidence we have on the health consequences to smokers.

Q. Let me see if I can summarize it because we are about to end this portion of the videotape. It doesn't really matter what comes out now about cigarette smoking and health, that what we know about epidemiology, what we know about cigarette illness and disease indicates that the perception of the risk is too high in the marketplace anyway, so it doesn't really matter what's disclosed or how it's disclosed; the risk perception is already too high. Does that summarize --

A. I don't know what the "it doesn't really matter" means, but I will say the risk perception is already too high.

Q. What do you think would be a good way to -- we've got a couple of minutes left. What do you think would be a real good way for the public's risk perception on cigarettes to be right on the button, get right down to the -- where we'd put the hay down to where the goats can get it? What would that be? How would they do that? Let's just say we want the public to really know accurately the risk perception and not have this inflated risk perception

Page 175 that people are walking around with. How would you do that?

A. I would try alternative warning labels with people, and then after presenting the warning information, get them to give you their risk assessment, and experiment with different kinds of information to see which would lead them to have the correct risk belief.

Q. You would try new warning labels?

A. That's one thing you can control. And you can control access to that. That's one thing I would try.

Q. We are going to change the videotape now, so we are going to take a break.

THE VIDEOGRAPHER: We are off the record.

> (Discussion off the record.) THE VIDEOGRAPHER: This is Tape No. 3.

19 We are on the record. 20 BY MR. KERRIGAN:

> Q. One of the things you would do is you would try some different warning labels to try to get this risk business down to some more accurate level. perception of risk?

A. That's one approach you could take.

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O. What would you say in those labels?

A. I'm not sure exactly how I would do it. I would experiment with different kinds of things. You could try quantitative risk information, but I'm not sure that would take. First you would want to get people to agree on what you would want to say as opposed to how you would say it. So I've estimated the risk of death as between .18 and .36. Can we refine that estimate at all? And you would like to refine it so you could try and get people as close to the true risk assessment as you could.

Q. You would try quantitative labeling. What else?

A. You could try qualitative labeling and then debrief them on where it puts them in the quantitative risk scale.

Q. Say that in a way that I can understand it. What would you say?

A. I don't know what I would say. I could try different kinds of language on cigarettes that asks them if you saw this language on cigarettes, what would you assess the mortality risk to be, et cetera, et cetera, to try to see which kinds of words --

Q. Wait just a second. You are saying

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mortality risks. Is that what you are trying to warn 2 about is mortality? You are not trying to warn about 3 morbidity?

- A. That's the primary focus, mortality.
- 5 Q. You are not trying to warn about chronic emphysema? 6

A. If they believe there is a 50-50 chance of being killed, for example, then that would have an equivalent effect as believing there is a, you know, .3 chance of death and some probability of emphysema. We can weight the different health outcomes, and that can be part of the process, and try to figure out what probability of death is tantamount to all the health risks of cigarettes.

O. With all of the work you've done and your familiarity with these law firms, have you read anything like that? Has anybody done the things you are talking about?

A. No. Congress has mandated the labels, and I've often in my writings urged the government to test warning labels relative to some risk reference point to see if people are on the money, so to speak. That's not the way Congress writes labels.

Q. Congress, you've mentioned this probably a dozen times in this deposition. Don't you take

respond to these risk beliefs in their decisions, and 2 that's what that means.

3 Q. Why do you think this work is controversial? Because it's new? You've said earlier because it's new. Is it because it's new or because it's absurd?

A. Which work?

Q. The whole risk perception work. All this risk perception work that you are doing that produces such results as teenagers understand the consequences of the risk and knowingly start smoking?

A. I never said that was controversial particularly. It wasn't controversial. That sailed right into a journal.

Q. You have sailed a lot of things into journals. What I'm asking you is what portion of your work do you think is controversial?

A. I think a lot of people assume that the reason people smoke is that they underestimate the risk. That would be the popular misperception. To the extent that's controversial, it challenges popular beliefs and misconceptions. It's not controversial in terms of the economic theory.

Q. Be awful hard to have anything that's controversial in economic theory, wouldn't it? You

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great refuge in the fact that the Congress has required the cigarette manufacturers to put the Surgeon General's warning on the pack? You take great comfort in that, do you not, as a warning?

A. I don't care whether it was Congress or the FDA. I mean, which government agency doesn't matter to me. But what is pertinent for the purposes of the litigation is that Congress has done it and they said once you put the labels on, you fulfill your informational obligation.

Q. Doesn't matter if the industry knows that that's not adequate or insufficient?

MR. ATKESON: Objection. Calls for legal conclusion.

MR. KERRIGAN: All right.

16 BY MR. KERRIGAN:

> Q. Did you make the statement that teenagers make informed, intelligent decisions about smoking?

A. I may have said that. May not be every teenager, but teenagers, 16- to 19-year-olds is the group.

22 Q. They make informed decisions about 23 smoking?

A. 16- to 19-year-olds either have accurate 25 risk perceptions or overestimate the risks, and they don't have to answer that if you don't want to.

A. There is no point to answering it.

Q. Don't they call it -- what is it, the 3 dismal science that you are engaged in? Is that the name? Or the dark science?

A. Two centuries ago they called it that.

7 Q. I thought they are still calling it that because it's basically assumptions that you make and theories that you give that in large measure is

devoid of academic merit. I'm saying that as a broad statement about economic publications, not you 11

12 personally.

> MR. ATKESON: Counsel, let me object. MR. KERRIGAN: I'm not trying to insult the witness. I just said in terms of economic

publications.

17 MR. ATKESON: Are you asking him how the name dismal science came about? 18

19 MR. KERRIGAN: Yeah. He could start 20 there.

A. It was not Malthus, but it was in that era, criticizing economics as the dismal science with the Malthusian population growth theories.

24 BY MR. KERRIGAN:

Q. Isn't the problem with all of this,

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CondenseIt™ FLORIDA vs. TOBACCO VISCUSI, KIP PH.D Page 183 like to ban cigarettes? Why is that a dilemma? Dr. Viscusi, is you get to express opinions, you get O. No, it's a false dilemma. I'm saying to be paid for opinions that nobody can really logically it's a false dilemma. You haven't talked determine are right or wrong? A. Sure you can. Go out and run a survey, about the people in this country who want the truth analyze the data, see what happens, publish it. You to be told about what cigarette smoking does to can verify my -- that's the beauty of empirical people. That's a group. Don't you see that group work. You can verify whether it's true or not. Same out there? Or is it just a group that want to ban with the cost calculations. You can verify whether cigarettes completely; that's the antitobacco group it's true or not. Get the numbers, crank them out. in the country. Q. But you have to work on your assumptions, A. That's one group. 10 Dr. Viscusi. You've got a list of assumptions that Q. There are a lot of people out there that 11 think the cigarette industry hasn't been truthful; are a mile long in your work. 12 you would agree with that, don't you? A. What assumptions? Let's go through them. 13 O. I would be glad to go through the A. Some people think that too. 14 Q. Well, do you think all these people are assumptions. 15 all in a big conspiracy of some kind? Kind of an A. That's fine. If you can come up with a 16 unstated conspiracy against the tobacco mile of assumptions, I'll be impressed. 17 Q. Let's reverse that and ask this: There manufacturers? 18 are no assumptions in your work, then. Your work is A. Conspiracies usually require meetings and 19 based solely on empirical data. That's fine. We collusion, and I think it's tough to meet with 20 thousands of people and getting them together. will leave it. Then we won't have to ask a question 21 Q. What do you think motivates these people? 22 on it. A. I think some of it may be trying to 23 A. My work on risk perception is just that. It's based on empirical data, which I compare to impose their own preferences on other people. 24 reference points established by government studies. Q. For the individual who smokes, tell me 25 Page 184 Page 182 the economic benefit to that individual. Q. Dr. Viscusi, the core of the whole A. They enjoy it. empirical data is just an effort to refine the 2 subjective phrasing of the questions in the survey. 3 Q. What makes you say that? A. They are willing to pay money for it. That's the assumptions that the questions are valid. Q. People pay money for heroin. It's implicit in all survey work, that the questions 5 A. They may enjoy heroin too. are valid. Do you agree with that or disagree with 6 Q. Your belief is that people smoke because 7 that? A. I assume -- I test whether the questions 8 they enjoy it? A. Yes. are valid. I don't assume that. 9 Q. You don't think there is any little spot Q. Well, we dealt with the one sensitivity 10 in there for addiction or what you've called test that you did. But implicit in survey work is an 11 assumption that the questions are eliciting responses habituation or addiction or anything like that? It 12 just sets a path; people do it because they like it? that are accurate? 13 A. They prefer smoking to not smoking, for 14 A. But you can check that in a variety of whatever reason. 15 ways. Q. How many people do you know that smoke Q. On page 171 you refer to an antitobacco 16 one or two cigarettes every now and then whenever crusade that's taking place in the country. What are 17 they feel like it? Do you know very many people like you talking about? 18 that? 19 A. There are a lot of people who would like

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http://legacy.library.ucsf.e&p/tipt/sgA7/a9A/vpffyr.industrydocuments.ucsf.edu/docs/nfal0001

economy. O. Is that the false dilemma?

A. What are we -- no, I don't think that's

mechanism they could to drive cigarettes out of the

to ban cigarettes, who would like to use any

the false dilemma. What's the dilemma that you would 25

because they enjoy it. Is there any other?

A. I know people who smoke cigars every now

and then, but I just don't know cigarette smokers. I

Q. I asked if you knew of any economic

benefit to the individual smoking, and you said

don't hang out with that crowd.

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A. If you are happier about your life, that 1 may have a benefit as well. If smoking makes them 2 happier, that could have dividends. But I have not 3

done research on that. 4

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- Q. Are you around people -- you say you are not around people that smoke?
 - A. That's correct.
- Q. So you don't have any anecdotal exposure 8 to somebody who is smoking every 38 minutes, or some such thing as that, to observe them? 10
 - A. I know a secretary at Duke who smokes. I've seen people smoke, but I've never had close enough proximity to monitor how often anybody smokes cigarettes, right now.
 - Q. Have you observed, just like the secretary at Duke, go a period of time in which she had to break and smoke a cigarette?
- 18 A. She wasn't my secretary, she was down the hall. So I would just see her occasionally. 19
 - Q. Have you ever been in a lung cancer ward?
- 21 A. No.
- 22 Q. You've made the statement, and correct me if I'm wrong, that the less well educated, if 23 anything, have a higher risk perception? 24
 - A. That's true.

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- Page 18: objection at this point. He was talking about the
- Q. So if we had a very uneducated person, they even think cigarettes are worse than everybody 2 else? 3
 - A. Or at least as bad.
 - Q. So you don't think that the cigarette manufacturers would ever try to target the poor, the young, the blacks? You don't think they would ever try to do that because these people have high risk perceptions? It would be foolish to target them for marketing, wouldn't it? A. There is an income elasticity as well in
 - that more affluent people are less likely to smoke. So you would want to target the groups who are more likely to smoke. If you are selling a product, you wouldn't try to sell the product to groups who will never smoke.
 - Q. So your comment that the uneducated have higher risk perceptions, are you saying that would
- 19 cause them to want to smoke more? 20 A. No, that would cause them to smoke less, 21 but let me just point out that when we talk about the 22 uneducated, we are talking about the categories in 23 the Audits and Surveys data. So we are not talking, 24 let's say, about a person who never set foot in school.

- O. I don't understand that. What's the distinction? You are saying you are not making a global statement; it's specific to the Audits and Survey data? 4 5
 - A. Right. So would be less than high school. It would be those educational categories that I've analyzed.
 - Q. You don't think that the cigarette manufacturers are targeting children and the poor because they are the least likely to understand the risk perceptions? You don't think that's true?
- 12 A. I don't have information on their 13 targeting of children.
 - O. That's a fair point. I want you to assume they target children, they target the poor, they target the ignorant; that that's their target market, that their documents say that's their target market. I want you to assume that. If they target that group, your comments today say that that group has a higher risk perception than anybody else, as high or higher?
 - A. Well, that group included the ignorant, as you point out, and the ignorant, if you mean ignorant of risk, it doesn't.
 - MR. ATKESON: Let me just interpose an
 - uneducated as defined in Audits and Surveys. He was
- not including the children and other things. Your group was broader than that.
- 5 MR. KERRIGAN: It was.
- 6 BY MR. KERRIGAN: Q. Let's take the 16- to 19-year-olds that
- you claim have a higher risk perception than adults. Let's take the uneducated that you claim have a
- higher risk perception than anybody else. And then 10
- I'm going to ask you to assume that the cigarette
- manufacturers have been targeting these people --
- hopefully, Dr. Viscusi, I'm not telling you something
- that's just like startling news to you. But if it
- is, I want you to assume in a hypothetical that they
- have been targeting kids and they've been targeting
- the uneducated, and that's where they are trying to
- 18 sell these cigarettes and get people started smoking
- and trying to addict them. I'm asking you if that is 19
- mutually exclusive with your comments that these 20 people have an already higher risk perception than 21
- anybody else. 22

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- A. No.
- 24 Q. Okay. Now explain to me, then, how that marketing, if we are talking about a hypothetical,

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marketing to that group is going to produce the results they want. They want to sell cigarettes in that group. 3

A. A couple of things. First there is an income effect. More affluent people are less likely to want to smoke than are the less affluent, so that that comes into play as well as risk perceptions. Second, all advertisers want younger consumers. If you look at TV shows and TV advertising, if you've got an audience that's the 45-year-olds or the 50-year-olds, even if you have high ratings they will cancel the show because that's not the consumer group the companies try to influence. They try to influence the younger consumers because that's where people are starting their consumption decisions.

O. Are you equating marketing by manufacturers in the United States to the teen buying market that's equivalent to the cigarette manufacturers trying to sell their cigarettes to teens? I want to make sure I understand. You say that's kind of all the same; is that it?

A. I didn't say that. What I said is that for the same reason that manufacturers of other products would target 20-somethings rather than 40somethings, the cigarette industry would also target

A. Yes.

Q. Who believes it has 100 percent probability of killing you? Would you name the people.

A. Every time this morning you said cause, a lot of people would interpret that to mean 100 percent probability, because you did not want to admit probabilistic terminology. And I think that's a misperception if you say cause in that manner. So that's where the kinds of misperceptions could arise.

Q. What did you say? I did not want to admit probabilistic --

A. We went around and around in circles. I don't know if you remember, but you wanted to say caused lung cancer, caused disease X, and I did not want to deal with that unless you included the fact that this causation relationship was probabilistic. that it was not a certainty, that there was some probability.

Q. In other words, it's not a certainty somebody is going to die of lung cancer because they smoke a lot of cigarettes; they could die of coronary artery disease, they could die or cirrhosis of the liver, they could die of other things; is what you are saying?

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younger consumers rather than older consumers.

Q. Did you finish your explanation on how targeting to the poor, the uneducated, and the children comports with your belief that the 16- to 19-year-olds and the uneducated have higher risk perceptions? Did you finish the answer to that question?

A. I believe so.

O. You are satisfied the answer is responsive to the question and expresses your opinion?

A. There are other factors other than risk beliefs that will influence targets.

Q. You made this statement: "They could release the studies," referring to the tobacco manufacturers. This is page 227 of your Mississippi deposition. "There is nothing preventing them from 18 releasing it. I think it would be very difficult for them to supply an interpretation of what the studies 20 meant because they might be criticized for anything that attempted to give people the perception that smoking did not have a 100 percent probability of killing you, because that seems to be the distorted perspective of many critics of smoking." Did you 25 make that statement?

A. That's correct.

Q. What is mutually exclusive about that and cigarette smoking causes lung cancer? Just something else got them quicker.

A. You are assuming if they had not died of heart disease, they eventually would have been killed by smoking -- it's that kind of certainty mentality that I think is wrong.

Q. I didn't say that. I'm just asking you --

A. You did. You said something else got them quicker. That implies that had that something else not killed them, lung cancer would have. And that shows the kind of fallacies that that kind of statement can lead to.

Q. You know what's fascinating about this discussion, is you are just as certain of your position is that since we don't know, it can't be true. How do you know that if somebody smoked 150 years they wouldn't all get lung cancer and die absent any other causes of death? How do you know that?

A. I don't really care what happens in 150 years. I care what happens in people's lifetimes. And to tell people if we lived in a fantasy land that

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you lived 150 years, you have to worry about something in year 140, I don't think that fosters accurate risk beliefs.

Q. How about this warning: "Cigarette smoking is like Russian roulette. May not kill you but it can." How about that? That's really an accurate risk perception, isn't it?

A. No, because you are not telling people the probability.

10 Q. Let's say you give them the probabilities that you have of death.

A. I wouldn't recommend that warning even if I were an antismoking advocate, as opposed to a hazard warning advocate, because saying things like Russian roulette makes it enticing and adventuresome, and I don't think you want that. You want to characterize the risk.

Q. How many times have you testified?

A. I don't know. 19

20 O. Over 100?

21 A. No, I haven't even been deposed that many 22 times.

23 Q. Have you spent any time with any focus group people on testifying? Any leaders of focus 24 groups or any focus group organizations?

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A. No.

Q. Have you spent any time with lawyers about how to testify, how to respond to questions, that sort of thing?

A. Other than the one-minute briefing before walking into depositions, no.

7 Q. So you've never had anybody assist you in how to give answers to questions that weave into the answers material that the questions did not ask? You've never had anybody show you how to do that or 10 11 counsel you how to do that? Not that you did that today; I'm just saying no one has taught you that 13 method of answering questions that takes the question 14 to an area that you want to respond to.

A. No, and I was not aware that I did that until you pointed that out. I'm not sure I do do that. It's not a skill that I was taught or was aware that I developed.

Q. Have you ever had your testimony reviewed by anybody, critiqued and looked at a written report or critique of your testimony?

A. Not to the best of my knowledge.

Q. What about orally, orally critiqued your testimony: Dr. Viscusi, this is the way you do this and then you look at the jury this way and then you turn this way, and when he asks this questions you do this or that? Have you had that kind of --

A. I've never had anything like that. All I get is when I'm done, they may say something like. "Good job." One-sentence summary comments when I'm done with the testimony, but no training of any sort.

Q. Okay. You attempted to answer the questions I've asked today based on the questions that were answered -- asked and not what you tried to weave into the answer, you did not intend to do that today?

A. No.

Q. Let me ask you if you've made this statement, that your view about the lifetime costs of smoking is not the kind of view that has many advocates. Have you ever said that?

A. Yes.

Q. "The antismoking constituency does not 18 like to hear that smokers pay their own way." Did 19 20 you make that statement?

A. I certainly did.

O. "Since the underlying premise of my argument is that smoking kills people, that is not the kind of argument that the cigarette companies would embrace with enthusiasm either."

A. I've said that as well.

2 Q. You take the position that smokers are 3 paying their own way?

A. Yes, in terms of these costs, yes, I do.

Q. What incentive did -- let me just strike that. We talked about this discount rate business, and I think you knew -- let me withdraw that. Is there a difference between a social discount rate and the individual discount rate? Those concepts have any meaning to you?

A. Social discount rate is what you would want to use to value government projects, and the literature on that suggests you want a lower discount rate than the private discount rate.

Q. Any difference, any significant difference in your analysis where you elected to use 3 percent?

A. Any significant difference from what? Q. Do these terms have any difference that

20 have any impact on your election to use 3 percent; 21 that is, if it's a social discount rate, individual

22 discount rate? 23

A. I was using the real rate of return to capital. I was not lowering that rate to take into account the fact society might want to transfer

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resources to future generations.

Q. And you were not raising the rate for -what was the reason? You always want to go to lower
the rate, and for some reason you don't want to ever
discuss about raising the rate. Let's talk about
raising the rate. What was the reason you didn't
raise the rate again? I know why you didn't lower

A. No reason to raise the rate because that's the private rate of return, and the social rate of discount literature argues the rate should be lower than the private rate of return.

Q. If you raise the rate, you don't get the results that you got?

A. It affects the results, but cigarettes still pay their own way at higher rates, once you count excise taxes. Depends on how high you go.

Q. Have you made a calculation with excise taxes to show us how high the rate can go where cigarette rates are still -- or cigarettes still produce a net positive effect for the state?

A. I haven't done that. I've done the state calculations for zero percent, 3 percent, 5 percent.

Q. I think there was an indication that you were going to testify that the proper methodology for

BY MR. KERRIGAN:

Q. What I was going to suggest is if you do a longitudinal study in health care of people who smoke cigarettes, you find a dramatic increase in the morbidity costs, dramatic increase from what we see in the Medicaid costs. Are you familiar with what I'm talking about, or do you have any response to that?

A. My estimates of the health costs overall to society are higher than the Medicaid costs. That's correct.

Q. Following an individual patient, person, for their lifetime, I'm suggesting would show that the actual morbidity associated with cigarette smoking is dramatically higher than we are able to now assess with the methodology we now have, since we don't have longitudinal studies. Would you agree with that or disagree with that?

A. If we don't have longitudinal studies, then we don't know what they are going to show.

Q. Excellent point. From anecdotal exposure to individual patients, would you agree with me, or, if you know, that if we had such longitudinal studies what we would demonstrate is that the costs associated with cigarette smoking is substantially

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analyzing the economic impact of smoking in this case is a longitudinal lifetime analysis?

A. That's the ideal way, and certainly you always want to do a lifetime analysis.

Q. Let me suggest something to you about that and see if you think it's colorable.

MR. KERRIGAN: By the way, Counsel, when we were given -- and I would just ask you at your convenience send me this Cigarette Taxes to Fund Health Care Reform publication that I couldn't read the one I got because of copying problems. It's mushed. Apparently somebody highlighted it, and the highlighting obscured the text.

MR. ATKESON: I will represent that's the copy I have. That's the copy that the witness has, but I will --

MR. KERRIGAN: You are not obligated to do that. I will go to the primary source. I just thought if you had a good copy --

MR. ATKESON: Unfortunately, that is the nature of the copy we have.

MR. KERRIGAN: I started the question, and then I digressed. Can you give me -- no, that was my fault. Can you give me the question back.

(The last question was read back.)

Page 200 higher than we are able to see in the models that we

now have? Would you agree with that?

A. I have no reason to believe that current models substantially underestimate the medical costs.

Q. You've given many opinions today on the questions that I've asked. Do you have any -- do you know of any additional major subject areas? I wouldn't hold you to some aside or some observation or study or something, but I'm asking if you know there is any major areas that you are going to be called to testify on. We've dealt with risk perception and the lifetime analysis of economic costs. Do you know of any other area?

A. No, those are the two main focal points articulating the lifetime analysis.

Q. And the tax issue that I understand you may -- is that what you were about to say?

A. No.

Q. Did you have anything else?

MR. ATKESON: Let me interpose, Counsel, in his disclosure we have indicated that on the lifetime analysis, he is not only going to say what he has done, but he is going to say what he believes is wrong with the approach that your experts are taking. And if you include that within the lifetime

Page 201 of your experts' approach there has to be a time analysis, so be it, but you haven't asked him. period involved, okay, his approach doesn't involve a BY MR. KERRIGAN: 2 Q. Without waiving our objection to any time period. And he is saying that to analyze this 3 expert expressing an opinion about any other expert, first way properly, he needs to have a time period in 5 which is a legal issue, you apparently hold some it. I do that so that -opinions about some of the experts in the Florida MR. KERRIGAN: I think that's helpful. 6 6 case, based on what counsel just said? 7 BY MR. KERRIGAN: 7 8 O. Why don't you restate to me precisely R MR. ATKESON: It's not about the experts. It's about the approach they have taken. 9 what your opinion is in regards to this time frame 9 10 MR. KERRIGAN: Approach they have taken. 10 that counsel is referring to here. What is your MR. ATKESON: Nothing to do with the 11 opinion? 11 12 A. Well, if the nature of your complaint is 12 experts. that the cigarette industry had some kind of behavior 13 13 MR. KERRIGAN: Okay. during some specified time period that led to harm to BY MR. KERRIGAN: 14 15 Q. So what opinions do you have about the the State of Florida, then we should only count the approaches that have been taken to model damages in costs attributable to smoking during that time period 16 16 17 when these actions that they shouldn't have taken 17 were taken by the industry. 18 18 A. The main opinion is that you should do a lifetime analysis, and you should approach it using 19 Q. I understand that position. Okay. And I 19 20 the but-for smoking framework. What would the costs 20 understand that testimony. You are saying insofar as to the State of Florida had been but for smoking any allegation of the State of Florida deals with 21 alleged bad conduct by the defendants, it was a during the period which you are alleging that the 22 22 precipitous cause of someone starting to smoke, that 23 cigarette industry is liable for these costs. So you you have to look at that individual and the net 24 want to limit the cost calculations to that 25 particular time period, and you want to analyze the effect of that individual starting to smoke; is that Page 204 Page 202 trajectory of costs incurred by smokers compared to accurate or inaccurate? nonsmokers, taking into account the lifetime analysis A. And the net effect of that conduct on 2 whether the person smokes. So if the person would and its consequences. 3 Q. Have you done that before? have smoked anyway --4 A. That's what my paper does. It does the 5 Q. Right. 5 51696 A. -- and your lawsuit is only about the lifetime analysis but --6 6 conduct, it's only the incremental effect of the Q. Vis-a-vis the Medicaid expenditures; that's what I was asking you. Do you come up with conduct, and if there is no effect of conduct on 8 something concrete that we can say, okay, here is behavior, zero. So there is nothing there to talk 9 what Dr. Viscusi is saying are the damages in Florida 10 about. 10 caused by cigarette smoking, even if it is a negative Q. You mentioned the term elasticity of 11 11 demand, and I want to pursue that just briefly with figure? Can you give us that figure today and how 12 12 you. Is there -- what is the elasticity of demand you arrived at it? 13 14 A. Just what's in that paper there that you 14 for teenage smoking, 16 to 19, if you know? A. There is a debate over that. Some people 15 15 Q. And what's in that paper shows 8 cents a think it's comparable to that of adults, which would 16 pack contribution to the state positive, plus excise be about minus .4. Other people think it's highly 17 17 18 taxes? elastic and the elasticity is greater than minus 1. 18 A. That's correct. 19 19 Q. What do you think? A. I've written that there is a debate, but 20 Q. Nothing else? Haven't missed anything? 20 21 A. That's right. I tend to place greater weight in my discussions on 22 the highly elastic estimates done by Michael Grossman MR. ATKESON: Counsel, just so -- I just

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want to do this so you haven't missed anything here.

I wanted him to tell you, just so you are aware of it

and you can ask him about it, when you said in terms

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and his colleagues, as opposed to the less elastic

we don't really know for sure.

estimates done by people at the Rand Corporation, but

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O. Have you expressed any opinions or do you hold any opinions regarding the effect of secondhand or environmental tobacco smoke?

A Yes.

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- O. What are those opinions?
- A. I've written about those in my article that was in the National Bureau of Economic Research volume, and I indicated that I thought the medical evidence at the current time was still highly uncertain. Nevertheless, I used the low-end estimates, the midpoint estimates, and the high-end estimates developed by EPA and OSHA for the environmental tobacco smoke risks to calculate the
- O. Do you think by your training and expertise that you are able to evaluate the medical literature on epidemiology?

costs associated with environmental tobacco smoke.

- A. I was a consultant to the EPA study that I'm critiquing. So for whatever reason, EPA asked me to be a consultant on this very same study. You can draw your own conclusion from that, but I don't think that that's an accident. I'm not a physician, but there are reasons people ask me to assess risk studies.
 - O. And I think not to be too modest about

A. I would continue my review of the analyses done for the plaintiffs. I will continue my analysis of the Audits and Surveys data, which I'm working with now. I'm not sure what, if anything, I'll do with my Florida-specific cost estimates that are in the paper, but I may come with more detailed estimates. So, for example, if the table doesn't include the sick leave component, I'll perhaps, you know, bring out the sick leave component from the analysis so at least I know that answer.

- Q. Do you know anything about the methods that the state has used to look at the damages in Florida, that is, the SAMMEC method and other methods?
- A. I haven't immersed myself in these things. I've reviewed Jeffrey Harris's analysis.
 - Q. Do you have an opinion about that?
 - A. Yes.
- Q. What is that opinion? 19
- A. That his analysis is flawed because he 20 does not take the lifetime approach. He, in effect, ignores the influence of smoking on longevity as part of his analysis.
 - Q. That's the defect?
 - A. That's the most salient defect. I would

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call his analysis primarily a back-of-the-envelope

epidemiology? A. No, I'm not an epidemiologist.

it, you claim a certain expertise, do you not, in

Q. Well, again, I get back to my question.

opinion on secondhand smoke?

- Not based on what some government agency may have agreed or actually asked you to do, I'm just asking, are you intellectually and academically qualified to review the epidemiological literature and express an
- A. I can review statistical studies, and I can critique their statistical analyses. So to that extent I do have the professional skills to critique that portion of the analysis.
- Q. In your course at the Harvard Law School, you teach some law, do you not?
- A. I don't teach a law course per se in the sense that I don't teach torts. I teach risk and environmental regulation, empirical methods for lawyers, economics of regulation and antitrust -those kinds of issues.
- Q. Do you plan to do any additional work on any of the matters that you discussed with us today prior to your testifying in Florida?
 - A. I'm sure I will.
 - O. In what areas will you do work?

- calculation as opposed to a detailed study.
- O. Back-of-the-envelope meaning kind of a shot-from-the-hip sort of approach?
- A. He went through several studies, figured out relative costs of smokers and nonsmokers, but he certainly didn't do the detailed kinds of breakdowns of smoking costs by category for Medicaid, for sick leave, for pension plans, for life insurance, et cetera, that I've undertaken.
 - O. You've undertaken this for Florida?
 - A. Yes, I have.

MR. KERRIGAN: Well, Counsel, I don't know what he has done, but I know what I got, and I don't have that.

MR. ATKESON: Well, Counsel, I think you

MR. KERRIGAN: Okay.

19 MR. ATKESON: I don't think you understood his testimony when he was talking about 20 the table. What he said was that if you go to the 21 total line at the end, that includes all of the 22

categories, even the ones that aren't printed on the 23 page. So sick leave, insurance. 24

25 MR. KERRIGAN: Right.

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            MR. ATKESON: And all these that were
                                                                  question is. Where is it?
     printed in the table are whatever, three or four.
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                                                                         MR. ATKESON: Ask him.
     whatever the categories are.
                                                                  BY MR. KERRIGAN:
            MR. KERRIGAN: Okay.
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                                                              4
                                                                      O. Where is this? You haven't shown it to
            MR. ATKESON: Has done that analysis for
                                                                  your lawyer. You haven't brought it to the
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     all 50 states.
                                                                  deposition. We haven't seen it. Where is it?
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                                                              7
                                                                      A. It's all back in my office, and
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            MR. KERRIGAN: Right.
                                                                 essentially when we are talking about what it is -- 1
            MR. ATKESON: Okay?
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                                                                 have piles of tables. But for Florida, if we turn to
            MR. KERRIGAN: Where is the output for
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                                                                  the page where we have Mississippi, I have the analog
     Florida?
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                                                                  of the Mississippi table for Florida. Mississippi
            MR. ATKESON: The output is in the
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                                                                  state estimates. The analog of Table 2, which goes
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    table.
                                                                  through all these components, sick leave, no tar
         A. It's in the bottom line.
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    BY MR. KERRIGAN:
                                                             14
                                                                  level, tar level changes, Manning and all
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         Q. I understand the bottom line. I'm just
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                                                                  assumptions, I can do that for any state.
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    saying where is the detail?
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                                                                      Q. Dr. Viscusi, you know, we are here in the
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            MR. ATKESON: Let me just explain how
                                                                 end of July. This deposition has been scheduled for
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    this came about. And if you want to inquire of him
                                                                  some time. We have had witness disclosures. Why
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     further on it, you can.
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                                                                  haven't you given it, at least, to your lawyer, who
            MR. KERRIGAN: I just wonder where the
                                                                 probably would have given it to me within 20 minutes.
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    detail is. Have I seen it?
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                                                                  but why haven't you given it to us?
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         A. No. He has not seen it.
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                                                                         MR. ATKESON: Counsel, I'm not sure
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           MR. ATKESON: I have not seen it. Do you
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                                                                  that's an appropriate question to the witness. You
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    want to do this on the record or off the record?
                                                                  and I can talk about discovery issues.
                                                                 BY MR. KERRIGAN:
           MR. KERRIGAN: I think we better keep on
25
                                                   Page 210
                                                                                                                Page 21:
    the record. At this point the tape would be out of
                                                                      Q. Let me ask this: Why haven't you done
    the deposition, so we can go ahead and do it.
                                                              2
                                                                 this? Why haven't you produced this?
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           MR. ATKESON: He told us that he had
                                                                      A. This is buried in a computer program. So
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    written an article that showed all 50 states. So we
                                                                 this could be generated. Were I to digest the
 4
                                                                 information, I've printed out the state summaries
 5
    said do you have something for Florida. He said
    yes. We said, okay, we are going to designate you as
                                                                 because that was the most meaningful way to summarize
 6
    an expert in Florida on this. I asked him at the
                                                                 it. At the time I did this article, I didn't know I
    time that we produced the information to you,
                                                              8
                                                                 would even be here today.
    whatever, a couple of weeks ago, you know, do you
                                                              9
                                                                      Q. You understand my earlier questions when
                                                                 I could not replicate from that table how you got to
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    have any further break-out of anything that would --
                                                             10
    in the article he does it specifically for
                                                             11
                                                                 that result. I guess my questions are probably
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    Mississippi as the example. I said, do you have the
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                                                                 clearer now because I couldn't figure it out.
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    equivalent of that for Florida. You know, it was all
                                                             13
                                                                      A. I tried to help you, I thought, by
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    tied up in however he did the article. He said I
                                                                 pointing out some of these categories, like fires and
                                                                 sick leave are subsumed in the total. I only show
    don't have it broken out for Florida. I have the
                                                                 the most salient components in this table. It was
16 results here. It's my understanding, I guess from
17
    what he is saying, is that he has now -- he can do
                                                             17
                                                                 mostly to save space. I was doing all 50 states.
                                                                                                                     51696
18 for Florida the equivalent of the equations you see
                                                             18
                                                                      Q. Where is the computer program that
    in there for Mississippi. You can ask him about
                                                                 generates this? Did you produce that?
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    that.
                                                             20
                                                                      A. No. It's done in conjunction with me and
                                                             21
                                                                 my research assistant. I mean, it's not a fancy
21
           MR. KERRIGAN: I can't ask about
22
    something I don't see.
                                                             22
                                                                 program.
           MR. ATKESON: You can ask him what he has
23
                                                             23
                                                                      Q. The question wasn't how fancy it was.
                                                             24
                                                                      A. North Carolina.
24
    done, at the very least.
25
           MR. KERRIGAN: I guess the more relevant
                                                             25
                                                                      Q. Did you produce it?
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Page 213

A. No.

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- Q. So we don't have the computer program and we don't have the output. We have the conclusion, but we don't have the output.
 - A. That's correct.
- O. Do you have any other opinions other than what you've expressed about Dr. Harris today, back of the envelope, doesn't take in lifetime costs or benefits? Do you have any other opinions about Dr. Harris's work?
- A. What did he do? All he did do was look at the relative costs of smokers compared to nonsmokers. He excluded everything else out of the analysis. So I view his as a very partial analysis compared to mine. All of the ingredients of my analysis that are in my analysis are missing from his, except for some of the recognition of the higher medical costs of smokers.
- Q. Dr. Viscusi, can you tell us today, I've done Florida and I estimate that Florida's Medicaid costs attributed to cigarette smoking is \$136 million for 1994-'95? Do you have a figure like that?
- A. No, and I would have to multiply my cost per pack by the number of packs.
- Q. But my question to you is, Have you made

Page 215 details if you are willing to accept my bottom line.

- You are trusting me that I did a sick leave analysis
- and that's why -- or a fire analysis, and that's why
- my total numbers were different than the sum of the
- items in the columns.
- 6 Q. Let me say this so you are not on any communication problem. It's not that I'm trusting
- you to have done certain things that you claim you
- have done. I'm just trying to find out what you did
- do, what you didn't do, and what your results are. 1 10 don't, you know, ascribe to it, I'm not criticizing 11
- it. I'm just trying to find out what it is so we can
- understand what it is that you've actually done and
- how you reached the conclusions you've reached. What
- I seem to understand now is that you have a computer
- program that has produced specific results for
- 17 Florida dealing with the items that are on the
- Mississippi schedule that produce the end result
- of .08 cents per pack net gain; is that right? 19
 - A. Yes.

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this.

- Q. And that my ability to cross-examine you on all of that now is rendered impossible because I haven't seen the detail. I couldn't possibly cross-examine you on something I don't see.
 - MR. ATKESON: Counsel, let me suggest

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calculations of specific damages for those three years that we are dealing with here, '94-'95,

'95-'96, '96-'97? 3

- A. No, because since Florida has no net damages, according to my approach, there is no reason to do such calculation.
- Q. Okay. So it's futile to do a calculation because, in essence, you would have a calculation showing how much money Florida is making because people are smoking cigarettes and dying?
- A. Right. If my analysis is correct and 12 it's adopted by the Court, there is no reason to go any further.
 - Q. Why would you want to do a break-out, then, of the Florida data like you did for Mississippi? What would be the point of that?
- A. I think it's superfluous since we know that cigarette smoking pays its own way, and you 18 don't really care it's a sick leave component or a fire component. Once you buy into my bottom line, we 20 are done.
- 22 Q. So the details, interesting, but doesn't 23 do much for the analysis?
 - A. If you don't do the details, you don't get the bottom line, but I don't have to tell you the

MR. KERRIGAN: Yes.

MR. ATKESON: You two can go back and 3 forth on this issue. If you would like, we would be happy to ask Dr. Viscusi to give us, you know, what he has got specific to Florida and go forward from 7 there, if you would like to redepose him. I would

- point out the reason I asked my question earlier that you got upset about, and I apologize if you got upset
- about it, but the reason I asked it is it is my 10
- understanding that this case is only about Medicaid-
- related costs, which would be then the medical care
- 13 and nursing home numbers here and would not have
- anything to do with pensions or anything else. The reason I asked you is to confirm that we are both
- operating on the same understanding. I don't know
- 17 whether we are or we aren't, but in any event, you have the only two numbers in those categories here on
 - this sheet, and the article tells you how they are calculated. Okay? And I don't know what more he has
 - done with regard to those two numbers.

22 MR. KERRIGAN: I don't either. I don't 23 know how he got those, but that's another matter.

MR. ATKESON: Counsel, I would point out that what the article says is that he built on the

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Page 217
                                                                                                                 Page 21
     1994 article. That lists the formulas in there and
                                                                         MR. KERRIGAN: Let me go back and ask
                                                              1
 1
    it's got an appendix. It says how each of those is
                                                              2
                                                                  him.
 2
    calculated. This then says how it's updated, and it
                                                              3
                                                                         MR. ATKESON: But, Counsel, let me just
 3
                                                                  say. I don't want to create any more problem than
     goes through how you go from the national number to a
 4
                                                                  there is. If it would make sense -- if this is the
    state number, an average state number, and how you go
 5
     from an average state number to a particular state
                                                              6
                                                                  last subject of your examination --
 6
    number. All of that is detailed in the article.
                                                              7
                                                                         MR. KERRIGAN: It is.
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                                                                         MR. ATKESON: If it would make sense to
           MR. KERRIGAN: What's troubling now about
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                                                                  hold this open, we will ask him to give us those
    this is if we are finished with Dr. Viscusi, that's
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    fine with me. If we are finished with Dr. Viscusi.
                                                             10
                                                                  documents, and we will give them to you, and we will
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                                                                  give you time to look them over, and you can
     I suspect we are not. And I suspect by the time we
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                                                             12
                                                                  determine then whether or not you want to ask him an
    get to trial, Dr. Viscusi will have charts and
12
                                                                  more questions. I would be happy to do that,
     diagrams and sick leave and a lot of other things
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                                                             14
                                                                         MR. KERRIGAN: Without stipulating one
    that I don't think are relevant here, but I just want
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                                                                  way or the other, it seems to me to be it's the only
    an opportunity to cross-examine if they are going to
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    be involved in the Florida litigation. You may say
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                                                                  thing that's left. I mean, I can't go on.
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    they can't be involved in Florida litigation. We are
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                                                                         MR. ATKESON: I don't know if you've got
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     only dealing with nursing homes and medical care,
                                                             18
                                                                  other subjects.
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                                                             19
                                                                         MR. KERRIGAN: No. I'm just saying on
    period.
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                                                             20
                                                                  this area, I don't see how I can go forward, but let
           MR. ATKESON: Counsel, that's the reason
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                                                                  me finish to make sure I know what else is coming
    I'm asking for your understanding because --
                                                             21
21
           MR. KERRIGAN: But I don't know what he
                                                             22
                                                                  along.
22
                                                                  BY MR. KERRIGAN:
    has done, Counsel. I can't really respond.
                                                             23
23
           MR. ATKESON: All I can do is tell you
                                                             24
                                                                      Q. You indicated that you were going to do a
24
                                                                  Florida-specific analysis. Is that if you are asked
    what the article says.
                                                             25
25
                                                   Page 218
                                                                                                                 Page 22
                                                                  by counsel, or do you just intend to do it? And if
 1
           MR. KERRIGAN: I'm ready.
                                                                  the lawyers say we don't need that, you are not going
 2
           MR. ATKESON: I don't know any more about
                                                                  to do it, I assume?
    what he has done than what he says in the article.
                                                              3
 3
    But the article says how he calculates for each state
                                                              4
                                                                      A. If asked by counsel, I could prepare the
    a medical care number and a nursing home number. And
                                                                  same kind of write-up I did there for Mississippi,
 5
    it's my understanding that since both of those relate
                                                                  where I have a section on Mississippi, along with
 6
                                                              6
                                                                  Mississippi tables. I could essentially do the same
    to Medicaid, that that's what is at issue in the
 7
                                                                  kind of thing for Florida, which would enable you to
    Florida case, and that Florida, unlike other states,
                                                              8
 8
                                                                  better understand all the different numbers.
    okay, doesn't have state employees and other things
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 9
    mixed in. That being the case, since this was not
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                                                                      Q. Do you understand that Florida is
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    prepared for litigation and he did this on his own.
                                                                  different than Mississippi in terms of state
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11
    he just did a chart that said I'm taking Manning and
                                                                  employees?
12
                                                             12
                                                                      A. Yes.
    bringing it down to a state level. And he did it for
                                                             13
13
                                                                      Q. And that the state employees are not
14
    all the states. So for Florida, if we were to say
                                                             14
                                                                  involved in Florida's damage model. Do you
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    how does this relate specifically to Florida
                                                             15
    litigation, he would probably take out some of the
                                                             16
                                                                  understand that? I mean, this is not a component of
    columns. So to come up with the savings or
                                                             17
                                                                  our damage case.
17
18
    nonsavings in Florida, one would have to compare the
                                                             18
                                                                         MR. ATKESON: Again, Counsel, to be
                                                             19
                                                                  honest, I'm not participating in the Florida case
19
    medical care cost number and the nursing home number.
                                                                  other than being here for the witness today. I don't
20
           MR. KERRIGAN: You would have to add
                                                             20
21
    back -- arguably add back taxes and other things
                                                             21
                                                                  know what issues there are and aren't in the Florida
    too. I mean, I think that's a component of it, and I
22
                                                             22
                                                                  case.
                                                             23
23
    don't know if that's out completely.
                                                                         MR. KERRIGAN: Let me tell you what they
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           MR. ATKESON: You can ask him that.
                                                             24
                                                                  are.
                                                             25
                                                                         MR. ATKESON: So to ask the witness, do
25
    Okay?
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Page 223

Page 224

Page 221 you know whether it is or is not, he isn't going to

2 know.

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BY MR. KERRIGAN:

Q. Is it safe to say you can't express today the opinions that you will express at the trial in the Florida case because you are not sure exactly what the damages are in the Florida case, what damages are being sought? Is that a fair statement?

A. I know what I've done and I don't know which components they will count at trial. So yes, I do not know which things they think will be relevant.

Q. All right. You've talked about Dr. Harris, the back-of-the-envelope and his lifetime analysis deficiencies. Are there anything else in Dr. Harris's work that you find to be not satisfactory or --

A. As I said, I would have liked him to do a fully comprehensive analysis like mine. He didn't.

MR. ATKESON: Let me pose a question. Is this over and above his general objection about plaintiffs' experts? You are talking about this specific area?

MR. KERRIGAN: Just to Harris and I want to go to each one of them.

to go to each one of them.

MR. ATKESON: In other words, he said he

Page 222

had a general problem with the fact that their

2 analysis is not time bound.3 MR. KERRIGAN: I un

MR. KERRIGAN: I understand that. He has already testified to that, and I understand that.

MR. ATKESON: I just want to make sure we are communicating clearly.

7 MR. KERRIGAN: I think he has said that a 8 couple of times.

9 BY MR. KERRIGAN:

Q. Any other objections about Dr. Harris?

11 A. No

Q. Have you ever testified before the United

13 States Congress?

A. Yes.

Q. Have you ever testified about the cost of cigarette smoking-induced illness and disease?

A. Before the U.S. Congress?

Q. Before the U.S. Congress.

19 A. No.

Q. Have you been asked to?

21 A. No.

Q. What matters were you testifying before

23 the Congress about, unless it was products liability,

24 and I don't want to go into that?

A. I've testified about regulatory reform,

product liability, hazardous waste cleanup, economic

2 forecasts for the country in terms of inflation,

3 interest rates. Testified on the wage-price

4 guidelines of the Carter administration. These kinds

5 of issues. Hazard warnings for alcoholic beverages.

Q. Nothing about smoking?

7 A. No.

8 O. Did you find any other deficiencies in

Dr. Tim Lynch's mortality ratio analysis and the

10 SAMMEC analysis?

A. I've read some of the Lynch

12 correspondence which seems to suggest that he does

13 believe in a lifetime approach. I've not reviewed

14 his analysis in detail. My main position with all

15 these people is that I think I've done the analysis

16 correctly, and I'm going to be using that as the

17 reference point for assessing these other people.

18 They should use the lifetime approach, et cetera, et cetera.

Q. So you are not prepared today to discuss the nuances of the SAMMEC model or mortality ratio and disease categories and that sort of thing?

A. No.

O. And costs associated therewith?

A. No.

Q. Are you familiar with --

MR. ATKESON: Counsel, let me suggest, we

3 don't intend to ask him to do that.

4 MR. KERRIGAN: Okay. I just wanted to 5 cover him while we're here.

6 BY MR. KERRIGAN:

Q. What about Dr. Len Miller, Dr. Vince

8 Miller, are you familiar with their work?

A. I've heard their names. I have their

10 work. I think I have some of their work. I've not

11 reviewed their work in detail.

12 Q. Do you now believe that you will be

13 expressing any opinions in any major areas other than

the areas that we have covered today? Any other significant areas in which you are going to express

significant areas in which you are going to express an opinion? For example, you've already said you are

not going to do it on warning, but a major area like

18 that, methods of warning or that kind of testimony?

A. No.

20 Q. Risk perception, lifetime analysis,

21 deficiencies in Dr. Harris's approach by failing to

22 use lifetime analysis, back-of-the-envelope, and the

23 time period involved?

A. And my analysis.

25 Q. And your analysis, of course. Have we

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pretty well covered the areas in which you reasonably
                                                                  arrives at it. I suspect that when we go through all
     anticipate that you are going to be giving testimony
                                                                  of this, he is not going to be adding anything for
 2
     in the Florida trial? I understand it could be some
                                                              3
                                                                 Florida. That would be my guess. If he does, I need
     minor thing or something. We don't play games about
                                                                 to see it.
     that. I just want to know the major areas and make
                                                                         MR. ATKESON: I can tell you, it's our
                                                              5
     sure we have all your opinions. The final question
                                                              6
                                                                  intention not to ask him to add anything to Florida.
 6
     is, Do you have any other opinions that I haven't
                                                              7
                                                                  if that's helpful.
 7
 8
     asked you about?
                                                              8
                                                                         MR. KERRIGAN: I understand.
            MR. ATKESON: You are including that
                                                              9
 9
                                                                         MR. ATKESON: Kip, in terms of making
    excise taxes as part of a lifetime analysis.
                                                                 those, whatever you've done, available to them and
                                                             10
10
                                                                  showing how each of these numbers is calculated, what
            MR. KERRIGAN: It is.
                                                             11
11
                                                                  is an appropriate time frame?
            MR. ATKESON: Fair enough.
                                                             12
12
    BY MR. KERRIGAN:
                                                             13
                                                                         THE DEPONENT: To provide the Mississippi
13
                                                                 tables, as well as the same write-up I gave there for
14
         Q. I suppose it's your opinion on the excise
                                                             14
    taxes is the state collects excise taxes and it has
                                                                 Mississippi for Florida, two weeks, because I'm not
                                                             15
15
    to be considered. Do you have an opinion beyond
                                                                 in my office this week, and my son is visiting
16
                                                                  Wednesday, Thursday, Friday, Saturday, Sunday, and
                                                             17
17
    that?
         A. They should be credited to the cigarette
                                                             18
                                                                 the following Monday, so I'm just not around.
18
    industry of doing a total tally.
                                                             19
                                                                        MR. KERRIGAN: I don't mind that.
19
         Q. Right, right. I assumed that was your
                                                             20
                                                                        MR. ATKESON: If we could give it to you
20
    testimony. Anything beyond that?
                                                                 the first week of August, is that --
                                                             21
21
         A. No.
                                                             22
                                                                        MR. KERRIGAN: That would be fine, if in
22
         O. Okay. Any other opinions that you
                                                             23
                                                                 fact you are going to give it to me, okay? I mean,
23
                                                                 whoever makes that decision might say, "We're not
24
    believe you may express?
                                                             24
         A. Nothing I plan to say in areas other than
                                                             25
                                                                 giving anything more."
25
                                                   Page 226
                                                                                                                Page 228
    those.
                                                                        MR. ATKESON: Counsel, no. I mean, I'm
                                                              1
 1
         Q. I want to assume that we got to the point
                                                              2
                                                                 the one who makes the decision.
 2
    we've gotten here to in good faith in terms of
                                                                        MR. KERRIGAN: Oh, I'm sorry. Okay.
                                                              3
    exchanging the information we've tried to exchange.
                                                                        MR. ATKESON: And I'll tell you, whatever
                                                              4
    No bad faith intended to be implied. But in order
                                                                 he has got, we will give you, and we will show you,
 5
                                                                 again, based on my understanding here that we are
    for me to ask any questions about any kind of a
    breakdown beyond the schedules that I've seen, I
                                                              7
                                                                 just talking about the medical stuff, we will show
 7
    would have to see that and expect that it be faxed to
                                                                 you exactly how the numbers in the medical care
                                                                 category and the nursing home category are
 9
                                                                 calculated. And if you would like to see - I mean,
10
           MR. KERRIGAN: And we perhaps could do
                                                             10
                                                                 I don't think it's that much more work. We can show
11
    him by telephone to supplement this deposition, which
    I would agree to do. I'm not going to make any other
                                                             12
                                                                 you how the other numbers are calculated for Florida,
12
    fuss about it, but I would like to look at it, until
                                                                 if that would be appropriate.
                                                             13
13
    you tell me, "I'm not going to even do that."
                                                             14
                                                                        MR. KERRIGAN: I don't know that in
14
           MR. ATKESON: Counsel, I'm not going to
                                                             15
                                                                 replicating --
15
    tell you you can't do that. Just in terms of timing
                                                             16
                                                                        MR. ATKESON: Taxes on there, whatever.
16
17
    here, let me just ask the witness when is the next
                                                             17
                                                                        THE DEPONENT: Yes.
    time he is going to be near where those documents
                                                             18
                                                                        MR. KERRIGAN: I don't know that that
18
    are. When you say fax, if he is not going to be near
                                                             19
                                                                 presents the problem. I think what presents the
19
    them for a couple of days -- I don't want --
                                                             20
                                                                 problem to me is what's not in the schedule that I'm
20
21
           MR. KERRIGAN: We are not on a two- or
                                                             21
                                                                 looking at, okay?
                                                                        MR. ATKESON: Sick leave and insurance.
22
    three-day timetable. We likely would supplement this
                                                             22
                                                             23
23
    in middle August, I would imagine, by phone one
                                                                        MR. KERRIGAN: Whatever else.
24
    afternoon for an hour and get done with it. I want
                                                             24
                                                                        MR. ATKESON: He has told you already,
25
    to know what the schedule is for Florida and how he
                                                             25
                                                                 these are -- if you had to have all the columns,
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	CONTRACTOR	1130	vibcobi, kii fil.i
}	Page 229		Page 231
1	these are all the columns. Okay? So what I will ask	1	SIGNATURE OF DEPONENT
2	him to do, then, is to give us the numbers for	2	
3	Florida for each of these entries for a state cost.	3	I, the undersigned, W. KIP VISCUSI,
4	You will find out, he will tell you, that from the	4	PH.D., do hereby certify that I have read the
5	state perspective there is no cost for fires, okay,	5	foregoing deposition and find it to be a true and
6	but as to the rest of the items there is a cost,	6	accurate transcription of my testimony, with the
7	okay? And I will ask him to tell us what each of	7	following corrections, if any:
8	those are. Most of them are reported on the table,	8	
9	but we will get all of them. And I will ask him to	9	PAGE LINE CHANGE REASON
10	give us the formulas that show exactly how each of	10	
11	those are calculated.	11	
12	MR. KERRIGAN: That's fine.	12	
13	MR. ATKESON: Would that be sufficient?	13	
14	MR. KERRIGAN: That's fine. We would	14	
15	also like to have	15	
16	MR. ATKESON: Is that	16	
17	THE DEPONENT: It's work. This is more	17	
18	than just doing the Mississippi write-up.	18	
19	MR. ATKESON: I understand, but is it	19	W. KIP VISCUSI, PH.D. Date
20	doable, just so that he can	20	
21	THE DEPONENT: It's feasible. It's work.	21	
22	MR. KERRIGAN: If we have two weeks as a	22	
23	tentative timetable here	23	
24	MR. ATKESON: If we run into a problem,	24	
25	we will let you know, but in any event	25	
	Page 230		Page 232
1	THE DEPONENT: I can give you answer •	1	CERTIFICATE OF REPORTER
2	before I can give you the formulas. I can give you	2	
3	tables before I can give you the formulas.	3	I, Joanne Blair, Registered Professional
4	(Discussion off the record.)	4	Reporter and Notary Public for the State of Florida,
5	THE VIDEOGRAPHER: We are off the	5	do hereby certify:
6	record. This is the end of Tape 3.	6	
7	(The proceedings concluded at 2:25 p.m.)	7	That the foregoing deposition was taken before
8	(The proceedings constant at 2.25 pinns)	8	me on the date and at the time and location stated on
9	1	9	page 1 of this transcript; that the witness was duly
10	!	10	sworn to testify to the truth, the whole truth, and
111		11	nothing but the truth; that the testimony of the
12		12	witness and all objections made at the time of the
13		13	examination were recorded stenographically by me and
14	1	14	were thereafter transcribed by computer-aided
1		15	transcription; that the foregoing deposition as typed
15			is a true, accurate, and complete record of the
16	ł	16	The state of the s
17		17	testimony of the witness and of all objections made
18		18	at the time of the examination.
19		19	I further certify that I am neither related to
20	1	20	nor counsel for any party to the cause pending or
21		21	interested in the events thereof.
22		22	
23		23	
24		24	
25		25	
D	220 Dogo 222 A WILLIAM	DC	DEPTS ID & ASSOCIATES (200)743-DEP(